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Reasons for Decision

TransCanada PipeLines Limited, NOVA Gas Transmission Ltd., and Foothills Pipe Lines Ltd.

RH-003-2011

March 2013

Tolls and Tariff

Canada

National Energy Board

Reasons for Decision

In the Matter of

TransCanada PipeLines Limited, NOVA Gas Transmission Ltd., and Foothills Pipe Lines Ltd.

Business and Services Restructuring Proposal and Mainline Final Tolls for 2012 and 2013

RH-003-2011

March 2013

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Cat No. NE22-1/2012-6E
ISBN 978-1-100-21589-1

This report is published separately in both official languages. This publication is available upon request in multiple formats.

Copies are available on request from:
The Publications Office
National Energy Board
444 Seventh Avenue S.W.
Calgary, Alberta, T2P 0X8
E-Mail: publications@neb-one.gc.ca
Fax: 403-292-5576
Phone: 403-299-3562
1-800-899-1265

For pick-up at the NEB office:
Library
Ground Floor

Printed in Canada

N° de cat. NE22-1/2012-6F
ISBN 978-0-662-71995-3

Ce rapport est publié séparément dans les deux langues officielles. On peut obtenir cette publication sur supports multiples, sur demande.

Demandes d'exemplaires :
Bureau des publications
Office national de l'énergie
444, Septième Avenue S.-O.
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Des exemplaires sont également disponibles à la bibliothèque de l'Office
(rez-de-chaussée)

Imprimé au Canada

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Abbreviations

ADOE	Alberta Department of Energy
ANE	Alberta Northeast Gas, Limited
APPrO	Association of Power Producers of Ontario
ATCO Gas	ATCO Gas and Pipelines Ltd.
ATM	Alternative Tolling Methodology
ATWACC	After-Tax Weighted Average Cost of Capital
Bcf/d	Billion cubic feet per day
B.C.	British Columbia
B.C. Ministry	British Columbia Ministry of Energy and Mines
Board or NEB	National Energy Board
BP	BP Canada Energy Group ULC
CAPM	Capital Asset Pricing Model
CAPP	Canadian Association of Petroleum Producers
CD	Consumed Depreciation
CDA	Central Delivery Area
Centra	Centra Gas Manitoba, Inc.
Centram SSDA	Centra Manitoba South Saskatchewan Delivery Area
CSV	Consumed Service Value
DCF	Discounted Cash Flow
DDA	Distributor Delivery Area
DMR	Discretionary Miscellaneous Revenue
Dth/d	Dekatherms per day

ECAPM	Empirical Capital Asset Pricing Model
EDA	Eastern Delivery Area
EGNB	Enbridge Gas New Brunswick Limited Partnership
EME	Eastern Mainline Expansion
EPH(s)	Economic Planning Horizon(s)
Extension or ASE	Alberta System Extension
FERC	Federal Energy Regulatory Commission
Foothills	Foothills Pipe Lines Ltd.
FST	Firm Service Tendered
FT	Firm Transportation Service
FT-SN	Firm Transportation Short Notice
GAAP	Generally Accepted Accounting Principles
Gaz Métro	Société en commandite Gaz Métro
GJ	Gigajoule
GLGT	Great Lakes Gas Transmission Company
GPUAR	*Gas Pipeline Uniform Accounting Regulations*
GRR	Gross Revenue Requirement
IGCAA	Industrial Gas Consumers Association of Alberta
IGUA	Industrial Gas Users Association
IT	Interruptible Transportation Service
LDC(s)	Local Distribution Company (or Companies)
LNG	Liquefied Natural Gas
LTAA	Long-Term Adjustment Account

LT-WFS	Long-Term Winter Firm Service
MAS	Market Area Shippers, which consists of Enbridge Gas Distribution Inc., Union Gas Limited and Société en comandite Gaz Métro
MFP	Multi-Year Fixed Price Service
MLP(s)	Master Limited Partnership(s)
MRP	Market Risk Premium
NEB Act	*National Energy Board Act*
NGTL or NOVA	NOVA Gas Transmission Ltd.
NIT	NOVA Inventory Transfer
NOL	Northern Ontario Line
OM&A	Operations, Maintenance and Administrative
Ontario	Ministry of Energy for Ontario
Prairies	The Prairies segment of the Mainline
Québec	Ministère des Ressources naturelles et de la Faune – Gouvernement du Québec
RAM	Risk Alleviation Mechanism
ROE	Return on Equity
RP or Restructuring Proposal	The TransCanada Business and Services Restructuring Proposal
SMB	Saskatchewan/Manitoba Border
SQ or Status Quo	The Mainline's existing tolling methodology
STAA	Short-Term Adjustment Account
STFT	Short Term Firm Transportation Service
STS	Storage Transportation Service

STS-L	Storage Transportation Service-Linked
ST-SN	Short Term Short Notice Service
SWDA	Southwest Delivery Area
TBO	Transportation by Others
Tcf	Trillion cubic feet
TJ/d	Terajoules per day
TransCanada	TransCanada PipeLines Limited, unless the context otherwise requires
Tenaska	Tenaska Marketing Canada
TSA	Toll Stabilization Adjustment account
TTF	Mainline Tolls Task Force
TQM	Trans Québec & Maritimes Pipeline Inc.
UCA	Office of the Utilities Consumer Advocate
Union	Union Gas Limited
UDCs	Unutilized Demand Charges
U.S.	United States of America
WCSB	Western Canada Sedimentary Basin
WEG	Western Export Group
YEC	York Energy Centre LP

Glossary of Terms

Alberta System Extension	Extension of the TransCanada Alberta System service.
Basis point	One-hundredth of a percentage point, used in reference to interest rates or rates of return on equity.
Beta	A measure of the systematic risk of a security, which estimates the extent to which a stock's price fluctuates more or less than average when the market fluctuates.
Billing determinants	Calculated values used in allocating a revenue requirement between tollpayers. They account for both volumes and distances.
Business risk	The risk attributed to the nature of a particular business activity (as distinct from financial risk); for pipelines, it typically includes supply, market, regulatory, competitive, and operating risks.
Capital Asset Pricing Model	A method used to estimate the cost of equity capital by comparing the return and risk characteristics of an individual company's shares with the market average.
Capital structure	The way in which a business is financed; generally expressed as a percentage breakdown of the types of capital employed.
Competitive risk	The business risk that results from competition for customers at both the supply and market ends of a pipeline system.
Delivery Area	A geographic area within a toll zone that is comprised of multiple delivery points where shippers receive delivery of their natural gas.
Depreciation Study	Mainline Depreciation Study.
Discounted cash flow	A method used for estimating the cost of common equity based on the expected dividend yield of the company's shares and the expected future dividend growth rate.
Economic Planning Horizon	The period over which it is expected that an asset will have a useful life. In the context of depreciation, the economic planning horizon is often used to establish a truncation period.
Embedded cost of debt	The weighted-average historical cost of long-term debt outstanding.

Financial risk	The risk inherent in a company's capital structure; financial risk increases as the proportion of debt increases.
Load Centre	A location within each toll zone or domestic delivery area calculated based on the energy-weighted average distance of haul for firm service deliveries during the base year.
Long-Haul	Transportation service originating at Empress or a Saskatchewan receipt point.
Market risk	The business risk that stems from the overall size of the market and the market share that a pipeline is able to capture.
Regulatory risk	Risk to the income-earning capability of the assets that arises due to the method of regulation of the company.
Revenue requirement	The total cost of providing service, including operating and maintenance expenses, depreciation, amortization, taxes, and return on rate base.
Restructuring Proposal	TransCanada Business Services Restructuring Proposal
RH-1-72	Phase II of NEB proceeding on TransCanada's Application concerning Tolls and Tariff (Reasons for Decision dated May 1973).
RH-2-76	NEB proceeding on Interprovincial Pipe Line Limited Application for Tariff and Tolls (Reasons for Decision dated December 1977).
RH-3-86	NEB proceeding on TransCanada's Application for new tolls effective 1 January 1987 (Reasons for Decision dated May 1987).
RH-4-2001	NEB proceeding on TransCanada's 2001-2002 Fair Return Application concerning cost of capital for the Mainline (Reasons for Decision dated June 2002).
RH-2-2004 Phase II	NEB proceeding on TransCanada's 2004 Mainline Tolls and Tariff Application (Phase II Reasons for Decision dated April 2005).
RH-3-2004	NEB proceeding on TransCanada's North Bay Junction Application (Reasons for Decision dated December 2004).

RH-1-2008	NEB proceeding on Trans Québec & Maritimes Pipelines Inc. Application dated 17 December 2007 concerning cost of capital (Reasons for Decision dated March 2009).
Settlement	Mainline 2007-2011Tolls Settlement
Shale gas	A form of unconventional gas that is trapped within shale, a sedimentary rock originally deposited as clay or silt and characterised by extremely low permeability or ability to flow. The majority of the gas exists as free gas or adsorbed gas though some gas can also be found in a dissolved state within the organic material.
Short-haul	Transportation service originating at locations other than Empress or a Saskatchewan receipt point.
Status Quo	The Mainline's existing tolling methodology.
Supply risk	The risk that the physical availability of natural gas could affect a pipeline's income-earning capability.
Test Year	A forward-looking 12-month period used for ratemaking purposes.
Throughput Study	TransCanada 2012-2013 Canadian Mainline Throughput Study.
Tight gas	A form of unconventional natural gas that is held in the pore space of a rock that has a lower permeability or ability to flow than usual for that type of rock.
Tolls Task Force	A joint industry task force initiated by TransCanada. Its membership is comprised of a wide cross-section of the natural gas industry, including representatives of the producing, marketing, brokering and pipeline segment of the industry, provincial governments and local distribution and industrial end-use customers.
TransCanada Contribution	Voluntary contribution of $25 million per year by TransCanada to reduce the Mainline revenue requirement for 2012 and 2013.

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* and the regulations made thereunder;

AND IN THE MATTER OF an application dated 1 September 2011 by TransCanada PipeLines Limited NOVA Gas Transmission Ltd. and Foothills Pipe Lines Ltd. under Part IV of the *National Energy Board Act* for orders approving, among other things, tolls that TransCanada PipeLines Limited may charge for transportation services provided on its Mainline pipeline system (Mainline) between 1 January 2012 and 31 December 2013 under File OF-Tolls-Group1-T211-04 01;

AND IN THE MATTER OF National Energy Board Hearing Order RH-003-2011, dated 27 September 2011;

AND IN THE MATTER OF certain proposals made by intervenors in the RH-003-2011 proceeding for decisions or orders that determine how tolls are to be fixed for Mainline transportation services for 2012 and beyond.

HEARD in Calgary, Alberta on 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29 June 2012, and in Toronto, Ontario on 9, 10, 11, 12, 13, 16, 17, 18, 19, 20 July 2012, and in Montréal, Québec on 20, 21, 22, 23, 24, 27, 28, 29, 30, 31 August 2012, and in Calgary, Alberta on 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 24, 25, 26, 28 September 2012 and 1, 2, 3, 4 October 2012 and 13, 14, 15, 16, 19, 20, 21, 22, 23, 29, 30 November 2012 and 3, 4, 5 December 2012;

BEFORE:

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L. Mercier	Member

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Chapter 1

Disposition

The Business Environment

The Mainline is in an unprecedented position. No major NEB regulated natural gas transmission pipeline has ever been affected by market forces to the extent that the Mainline is now affected. Throughput on the Mainline has decreased significantly, and as a result, Mainline tolls have increased substantially over a short period of time.

The future of the Mainline depends on how TransCanada is able to respond to the changes to its business environment. The Mainline faces increasing competition for gas supply from intra-Alberta demand, other ex-Western Canada Sedimentary Basin (WCSB) pipelines and new markets for WCSB gas. The Mainline competes with pipelines from emerging shale and tight gas basins in the United States of America (U.S.), which deliver gas to eastern markets. The Mainline must adjust to this new environment because eastern consumers may not renew contracts for long-haul service and bypass infrastructure may be built.

Tolls cannot continue to increase each year in response to throughput decline. Costs associated with throughput variation have been passed to remaining Firm Transportation service (FT) shippers. Those shippers have borne all of the costs of, and the risk associated with, competition. If this were to continue, the Mainline's competitiveness could further erode and exacerbate the root cause of throughput declines.

Our Decision

The multi-year fixed tolls approach we have adopted stops the toll increases. Our Decision sets the FT toll from Empress, Alberta to Dawn, Ontario at $1.42/gigajoule (GJ), compared to the 2013 Status Quo toll of $2.58/GJ. We expect this toll to remain in effect through 2017. Recognizing the increased business risk that the Mainline is facing, we have approved the Mainline's return on equity (ROE) at 11.5 per cent on a 40 per cent equity ratio. We have also approved an incentive mechanism that would further increase the Mainline's profits if annual net revenues are higher than forecast.

We have approved several elements of TransCanada's Restructuring Proposal, including all of TransCanada's proposed changes to the Mainline's cost allocation, and the elimination of toll zones and the elimination of the Risk Alleviation Mechanism (RAM). In some cases, we have granted TransCanada more than it proposed, in particular, by conferring greater discretion upon TransCanada in how it prices Interruptible Transportation service (IT) and Short Term Firm Transportation service (STFT).

We have not approved the Alberta System Extension (ASE or Extension), the reallocation of accumulated depreciation and the proposed treatment of costs related to TransCanada's

agreement for transportation services on Trans Québec and Maritimes Pipeline Inc.'s (TQM) pipeline system. We view the ASE as inappropriate cost shifting among affiliate companies that is contrary to sound tolling principles, such as the principle of "no acquired rights or obligations," which we believe must be upheld. In our opinion, shippers' costs and benefits do not extend beyond a contract under which service was requested and made available. The ASE violates this principle and, accordingly, cannot produce tolls that are just and reasonable.

Multi-Year Fixed Tolls

We believe that multi-year fixed tolls will better enable the Mainline to address the current challenges imposed on it by the business environment in which it operates. Given the increase in throughput that is forecast, averaging the FT toll over a multi-year period lowers the FT toll immediately and better allows the Mainline to compete.

Multi-year fixed tolls provide toll certainty and stability for shippers. Shippers noted it was difficult to make contracting and investment decisions without knowing how much it would cost to transport on the Mainline. Multi-year fixed tolls provide a competitive advantage over the Status Quo and over the elements of the Restructuring Proposal that we have approved.

Greater Pricing Discretion

The current pricing methodology for IT and STFT is not appropriate. Shippers using IT or STFT to meet a firm operating requirement do not contribute sufficiently to the Mainline's fixed costs. For example, shippers are increasingly able to meet their peak requirements for gas by contracting for STFT for a short term (for as little as one week), often paying only 110 per cent of the corresponding FT toll for that term. This provides shippers the assurance that they will receive service when they need it, but pay only a fraction of the full year's cost of having the Mainline's capacity available to them.

The pricing discretion proposed by TransCanada under the Restructuring Proposal did not go far enough. In our view, conferring greater discretion on TransCanada to set bid floors for IT and STFT service will provide TransCanada the opportunity to recover the costs of its capacity, during the period of time in which its capacity is used, from those who use it.

TransCanada will have to assess how to price IT and STFT. Optimizing billing determinants and maximizing net revenues on the Mainline, while mitigating the threat of bypass, requires TransCanada to exercise judgment about how much it charges. TransCanada is accountable for how it exercises its discretion and is encouraged by the new incentive mechanism to make decisions that result in the greatest Mainline net revenue, which in the long-run will benefit shippers who require Mainline service.

A Streamlined Regulatory Process

The North American natural gas market has changed and is continuing to change. We understand that the Mainline may need to develop new products and services to respond to market changes. In our view, the current process for approving changes to Mainline products and services can be

improved to allow the Mainline to better respond to its competitive environment. Accordingly, we have developed, and will implement, a streamlined regulatory process for new service and pricing proposals on the Mainline. The National Energy Board (Board or NEB) will issue its decision on new service and pricing proposals in as little as ten weeks from the date the application is filed. This will allow the Mainline to better respond to competition and alleviates concern that markets will change to make the multi-year fixed tolls uncompetitive on certain paths during the period of time in which they are fixed.

Opportunity to Recover Costs

We are not disallowing any Mainline investment from being recovered in tolls. In reaching this finding, we gave the most weight to TransCanada's forecast increase in Mainline throughput. Given that forecast, we are of the view that TransCanada should be afforded the time and tools to adapt to its business environment, and the time to take advantage of the opportunities offered by this Decision.

We recognize that throughput, cost and revenue forecasts may not be realized. We have compensated the Mainline through a higher allowed return for the increased variability risk it will face due to its cash flows being more dependent on the accuracy of its throughput forecast than in the past. We note that the Mainline's forecast of discretionary service revenue is conservative and was based on the Mainline having less discretion to set prices for IT and STFT. As a result, Mainline revenues and profits may be higher than forecast.

If larger-than-forecast cost deferrals were to occur, they could represent a materialization of the Mainline's fundamental risk and costs could be disallowed. If costs were disallowed, it would not mean that TransCanada did not have a reasonable opportunity to recover costs, but rather that events did not turn out as forecast or that this opportunity was not seized by TransCanada. A potential outcome is that the Mainline would suffer a loss – just like any other business that faces competition.

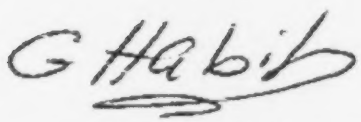
Conclusion

The Mainline faces increased competitive risk. Accordingly, we have provided the Mainline with the tools to respond to this risk, coupled with regulatory oversight and regulatory process flexibility to effect changes as appropriate. We find this to be important regardless of what the future holds in terms of whether all or part of the facilities continue to provide gas services.

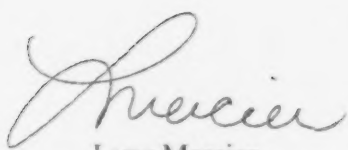
Our Decision enables TransCanada to meet market forces with market solutions. It is TransCanada's responsibility to ensure that the Mainline is economically viable and continues to be an important asset to connect the WCSB to markets in the east. The extent to which the Mainline is used as a supply option for consumers and a market option for producers can only be determined by a functioning free market. TransCanada must not look to regulation to shield the Mainline from its fundamental business risk. It must address the underlying competitive reality in which the Mainline operates.

We have provided TransCanada with the tools it requires to achieve positive outcomes for its investors and customers. Now, it must use those tools to construct a viable future.

Gaétan Caron
Presiding Member



Georgette Habib
Member



Lyne Mercier
Member

Calgary, Alberta
March 2013

Chapter 2

Introduction and Background

2.1 Overview of the Application and Hearing

On 1 September 2011, TransCanada PipeLines Limited (TransCanada), NOVA Gas Transmission Ltd. (NOVA or NGTL) and Foothills Pipe Lines Ltd. (Foothills) (collectively referred to as "TransCanada" unless the context otherwise requires) applied to the Board under Parts I and IV of the *National Energy Board Act* (NEB Act)[1] for approvals required to implement a proposed restructuring of the services on the TransCanada Mainline pipeline system (Mainline), the TransCanada Alberta System (Alberta System) and the TransCanada Foothills System (Foothills System). TransCanada also applied for orders fixing and approving tolls that it shall charge for transportation services provided on the Mainline between 1 January 2012 and 31 December 2013.

The Board issued a Hearing Order on 27 September 2011 setting the matter down for an oral public hearing. Soon thereafter, the Board held a pre-hearing planning conference to identify issues the Board should consider in the RH-003-2011 proceeding and to solicit comments on how to hear the Application. The List of Issues identified by the Board, and a detailed description of how the Board heard the Application, are set out in Appendix II and III to this Decision. The oral portion of the hearing, consisting of cross-examination and argument, took place in Calgary, Toronto and Montréal and lasted 72 days.

2.2 Description of the Mainline, the Alberta System and the Foothills System

TransCanada owns and operates the Mainline, which is a high-pressure natural gas transmission system that extends from Empress, Alberta (near the Saskatchewan border) across Saskatchewan, Manitoba, and Ontario and through a portion of Québec, and connects to various downstream Canadian and international pipelines. The Mainline is comprised of three geographical segments, with each one consisting of multiple lines. The three segments are the Prairies segment, the Northern Ontario Line (NOL) and the Eastern Triangle.

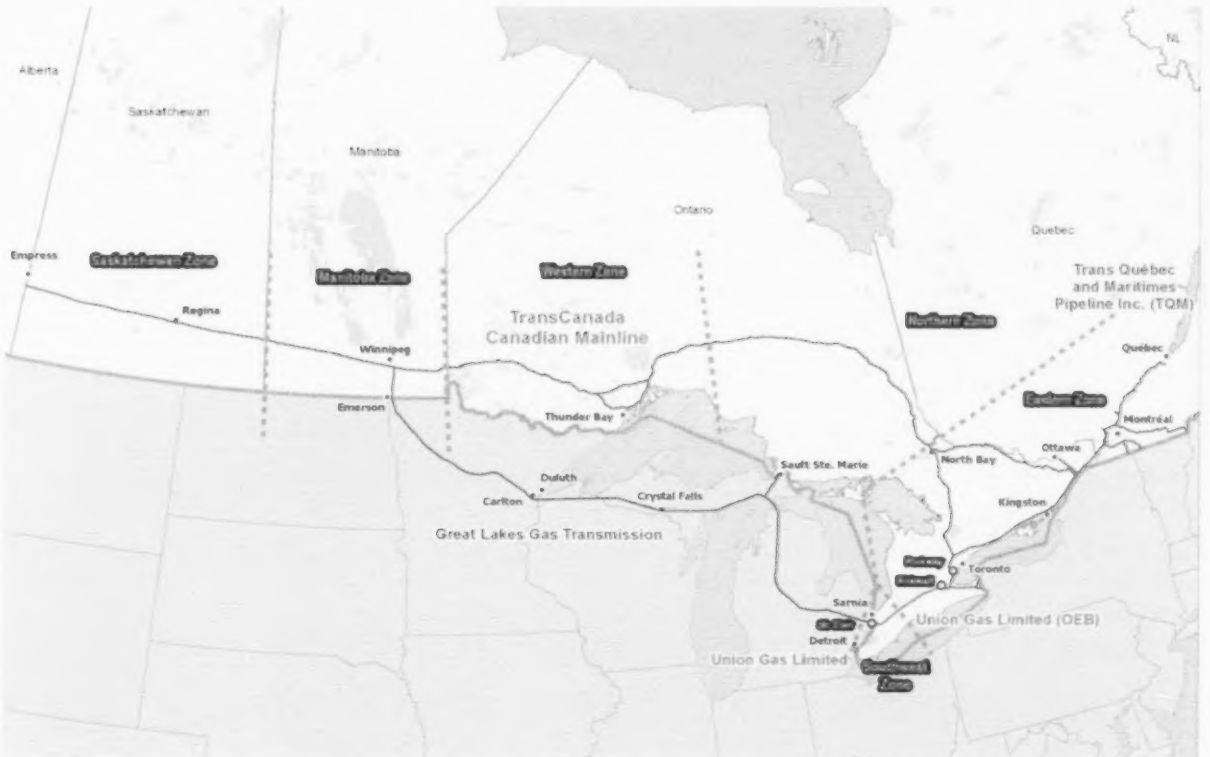
The Prairies segment commences at Empress, Alberta and extends eastward to a point near Winnipeg, Manitoba. The NOL commences at Winnipeg and extends eastward to a point near North Bay, Ontario. The Eastern Triangle commences at North Bay and extends southward to a point near Toronto, Ontario, and eastward, to a point near Ottawa, Ontario. These two points are connected by a section of the Eastern Triangle, called the Montréal line, which commences near Toronto and extends to a point near Montréal, Québec.

[1] R.S.C. 1985, c. N-7.

In addition, the Mainline integrated system includes contractual entitlements (called Transportation by Others or TBO agreements) used to transport natural gas on the Great Lakes Gas Transmission Company (GLGT) system from Emerson, Manitoba to St. Clair, Michigan; on the Union Gas Limited (Union) system from Dawn, Ontario to Parkway, Ontario and to Kirkwall, Ontario; and on the TQM System from St-Lazare to St-Nicholas and East Hereford, all in Québec. GLGT and TQM are affiliates of TransCanada. See Figure 2-1 for a map of the Mainline system.

The Mainline integrated system can transport up to approximately 7.0 billion cubic feet per day (Bcf/d) (198.3 $10^6 m^3/d$) of WCSB gas to market.

Figure 2-1 TransCanada Mainline



NOVA is a wholly owned subsidiary of TransCanada and NOVA owns the Alberta System, which is an extensive natural gas transmission system in Alberta and northeast British Columbia (B.C.) comprised of approximately 24,000 kilometres (km) of pipeline and associated compression and other facilities.

Foothills is a wholly owned subsidiary of TransCanada and is a large diameter natural gas pipeline system comprised of approximately 1,240 km of pipeline and associated compression and other facilities. The Foothills System extends from central Alberta to points at the Canada/U.S. border near Kingsgate, B.C. and near Monchy, Saskatchewan to serve markets in the U.S. Midwest, Pacific Northwest, California and Nevada.

Maps of the Alberta System and the Foothills System are provided in Figures 2-2 and 2-3.

Figure 2-2 Alberta System

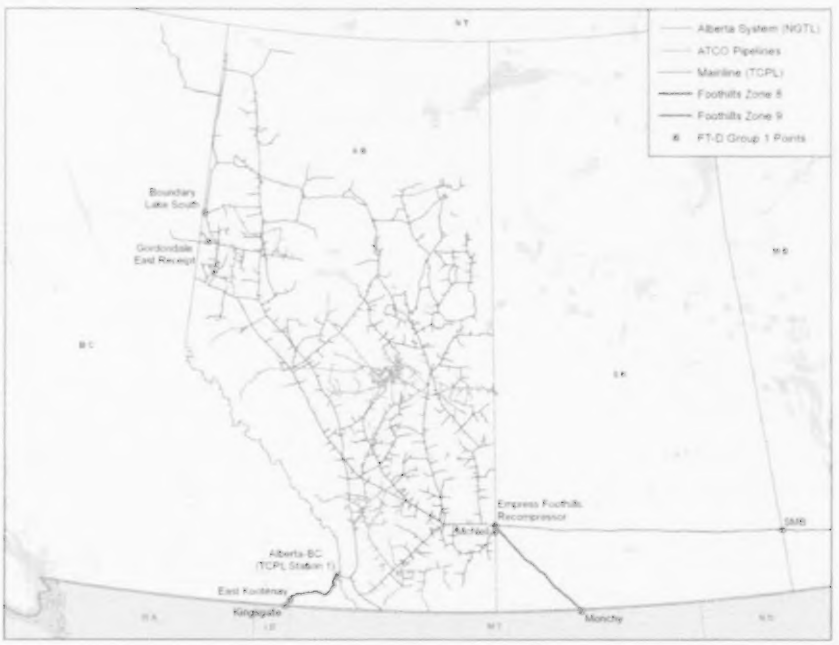
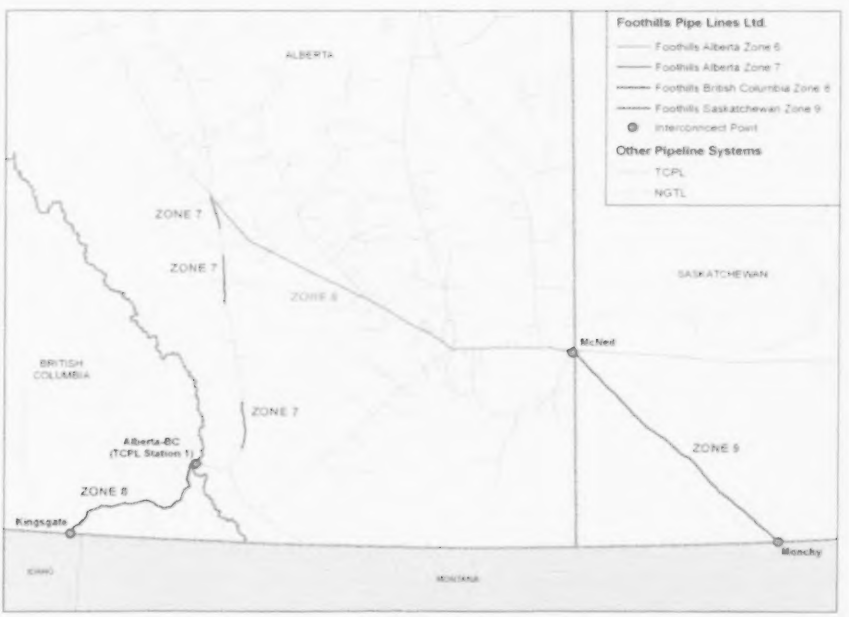


Figure 2-3 Foothills System



2.3 Recent Changes in the Mainline's Business Environment

Changes in the business environment of natural gas supply, markets and contracting practices have affected the long-term economic viability of the Mainline. Continued low prices for natural gas have led to a decline in drilling in the WCSB, which has in turn resulted in less gas delivered onto the western section of the Mainline. This, coupled with a decrease in the number of long-haul FT contracts, has led to lower throughput on the Mainline. Increasing tolls, in part caused by the drop in long-haul FT contracts, have also negatively affected the Mainline's ability to attract volumes.

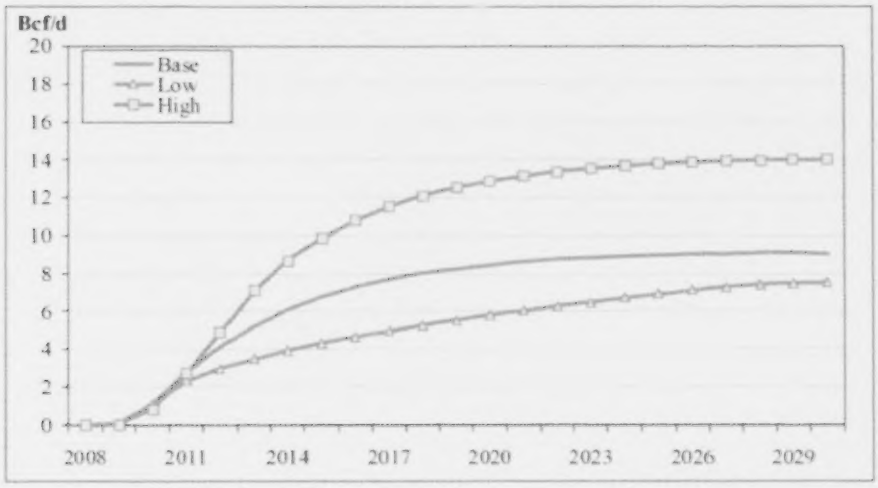
2.3.1 U.S. Shale Gas

Shale deposits have long been understood to be source rocks for natural gas and oil, which migrated to conventional reservoir types such as sandstone and carbonates. Shale gas wells attempting to exploit this source rock prior to 2005 typically produced natural gas at low rates. Since then, advances in technology have enabled firms to drill shale gas wells that produce at very high rates. Until recently, U.S. shale gas formed only a small portion of forecasts of future North American natural gas supply. TransCanada estimates that shale gas will make up 35 per cent of total North American supply, or 30 Bcf/d (849.8 $10^6 m^3/d$) by 2020.

Shale gas can be found in sedimentary basins all across North America. One of the largest and lowest production costs of these basins is the Marcellus shale gas basin located in the U.S. northeast. Production from the Marcellus is currently 4.5 Bcf/d (127.5 $10^6 m^3/d$) and TransCanada's Base Case supply forecast is for Marcellus production to reach 8.5 Bcf/d (240.8 $10^6 m^3/d$) by 2020 (Figure 2-4). The continued production increase from the Marcellus is forecast to occur in spite of the low prices for natural gas in North America. In addition, the Ohio Utica shale play could also add significant volumes of gas production in the region.

The location of the Marcellus and Utica basins puts them in direct competition with WCSB gas for markets that have been traditionally served by the Mainline. Competition now exists for markets in the U.S. northeast as well as in Ontario and Québec. Though flows on the Mainline to Québec and Ontario, as well as exports to the U.S. northeast, have declined in recent years, the extent to which WCSB volumes will continue to be pushed out of these areas is uncertain. The extent of displacement depends on many factors, including the growth of gas production from the Marcellus basin and the development of infrastructure to connect that production growth to markets.

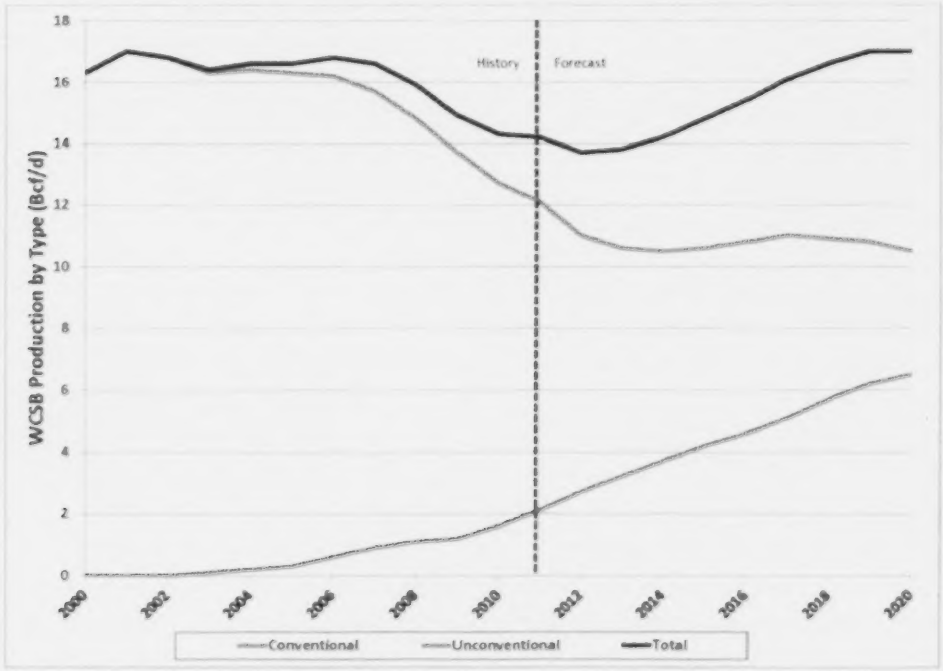
Figure 2-4 Marcellus Shale Gas Production Forecast



2.3.2 Decrease in WCSB Production

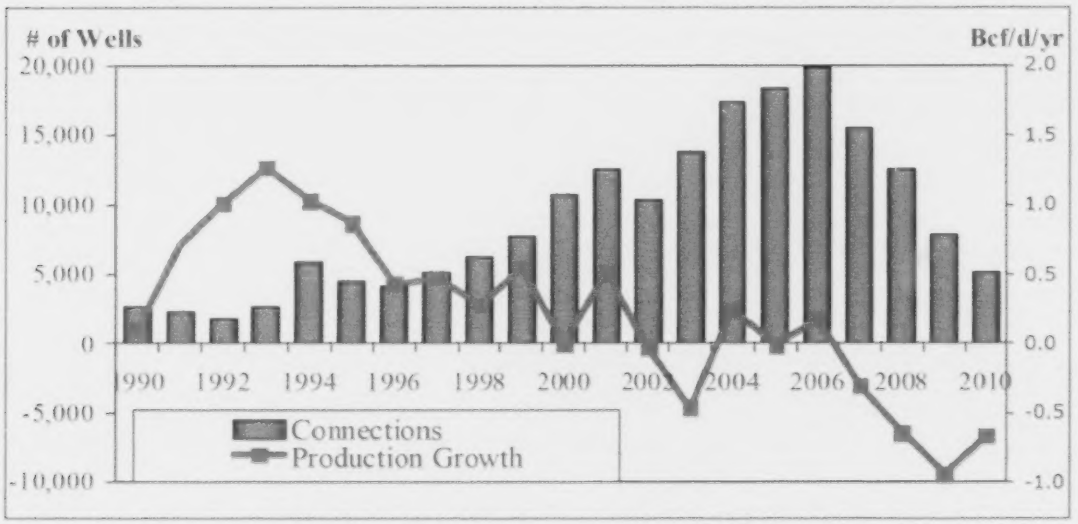
In addition to large increases in natural gas production from shale and tight gas basins in the U.S., there has been an overall decline in production from the WCSB. Figure 2-5 shows the production broken out by source.

Figure 2-5 WCSB Natural Gas Production by Source



Several factors have contributed to this decline. Chief among them is a marked increase in supply costs in the WCSB between 1996 and 2008 that has negatively affected its competitiveness relative to many basins in the U.S. Gas prices also increased substantially over the same period. This increase in gas prices did not result in a marked increase in WCSB production for the corresponding years due to the maturity of the basin. When a supply basin is new, the likelihood of finding pools of gas that are very large or that have high initial production rates is good; however, as the basin matures this likelihood decreases. Essentially, one has to drill more wells to maintain production and even more wells to increase it. This was the case with the WCSB through the early part of the previous decade. Though the increase in the price of gas increased the number of wells being drilled, this did not translate to a corresponding increase in the amount of gas being produced. Figure 2-6 illustrates this point. Going forward, unconventional plays are expected to dominate production growth in the WCSB much the same as they are now in many parts of the U.S.

Figure 2-6 Annual Well Connections and Production Growth



The low natural gas price environment witnessed in recent years has had a negative effect on WCSB production. Since peaking at $8.75/GJ in 2005, annual average Alberta plant gate prices have continued to decline, reaching $3.22/GJ in 2011. According to TransCanada's 2012 Base Case forecast, price will continue to decline through 2012 reaching $2.52/GJ before rebounding to $5.47/GJ in 2020.

2.3.3 Alternative Markets for WCSB Gas

Alternative markets for WCSB gas outside of the Mainline's traditional markets in Canada and the U.S. northeast include growing intra-Alberta demand and the potential for gas-to-liquids in western Canada and liquefied natural gas (LNG) liquefaction terminals on Canada's west coast.

Oil sands developments have been the primary driver for natural gas demand growth in western Canada that increased from 4.2 Bcf/d (118.8 $10^6m^3/d$) in 2000 to 5.0 Bcf/d (141.6 $10^6m^3/d$) in 2011. TransCanada expects growth from the oil sands and gas-fired electricity generation to continue to drive gas demand growth in western Canada to 6.6 Bcf/d (187.0 $10^6m^3/d$) in 2020.

TransCanada also indicated a gas-to-liquids facility in western Canada may be developed. The proposed facility would require between 0.5 and 1.0 Bcf/d (14.2 and 28.3 $10^6m^3/d$) of natural gas feedstock.

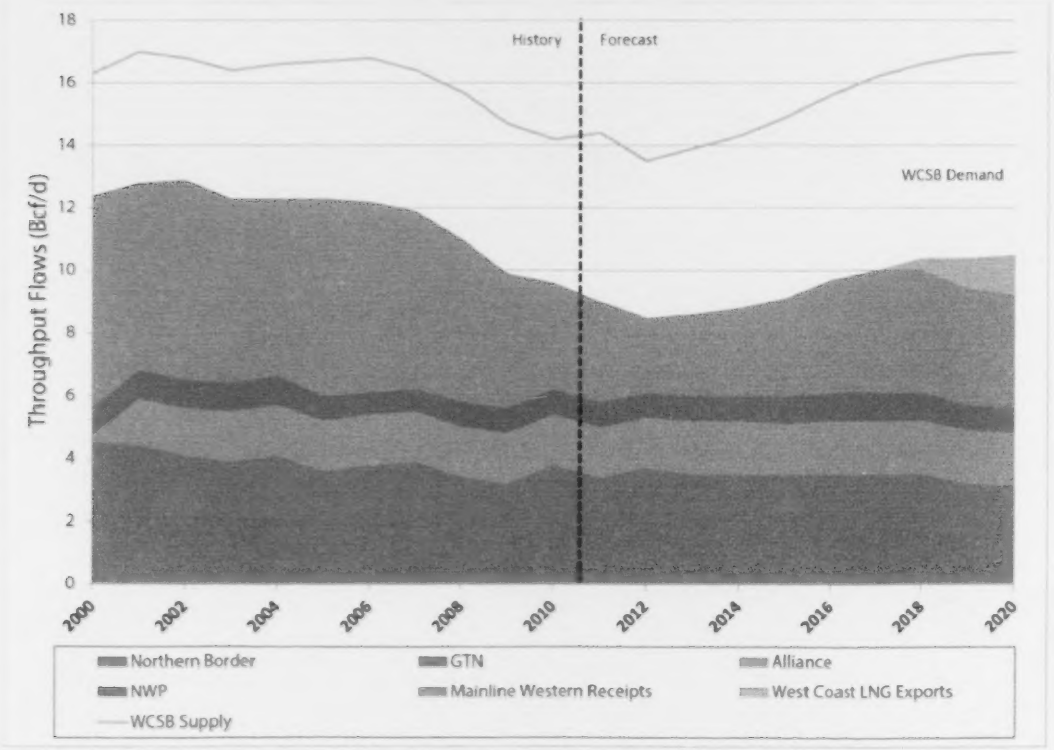
The expected development of large and prolific shale gas plays in B.C., and the prospect of natural gas prices being higher in Asia relative to North America, has led to several proposed LNG projects on Canada's west coast. Canadian LNG projects also represent an option for WCSB gas to reach markets outside of North America such as Asia. Four LNG projects with proposed in-service dates ranging from 2013 to 2018 have been announced. These projects have the potential to compete with the Mainline for WCSB supplies.

In its 2012 Base Case forecast, TransCanada assumed 0.4 Bcf/d (11.3 $10^6m^3/d$) of LNG exports starting in 2018, increasing to 1.3 Bcf/d (36.8 $10^6m^3/d$) by 2020.

2.3.4 Disposition of Western Canadian Production

Natural gas produced in the WCSB has five export pipelines through which it can flow, in addition to intra-Alberta uses. Figure 2-7 shows the disposition of WCSB production among each of these pipelines.

Figure 2-7 Disposition of WCSB Production



Mainline western receipts are defined as the volume of gas received at TransCanada's receipt point at Empress, Alberta and gas received onto the Mainline system within the province of Saskatchewan. The annual average volume of these receipts has undergone a steady decline in recent years from a high of 6.8 Bcf/d (192.6 10^6m^3/d) in 2000 to a forecast of 2.4 Bcf/d (68.0 10^6m^3/d) in 2012. In terms of a percentage of total production, this corresponds to 42 per cent of WCSB production in 2000 and 18 per cent in 2012.

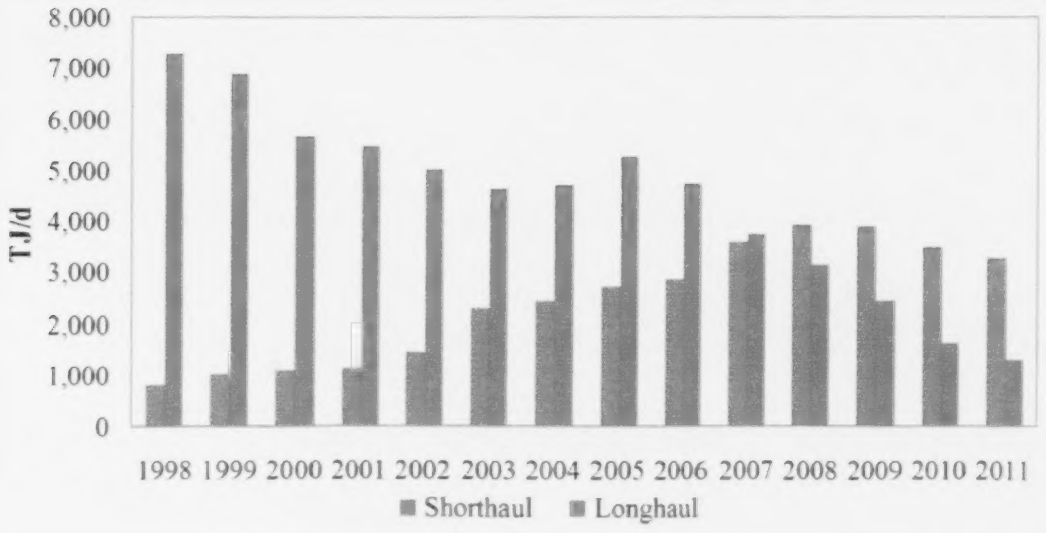
2.3.5 Change in Contracting Practices on the Mainline

Shippers' contracting practices on the Mainline began to change in 1999 in response to the greater availability of long-haul capacity and increased receipts of natural gas at Dawn, Ontario from other sources. Over the last five years, the level of long-haul FT contracts on the Mainline has declined significantly. For the most part, long-haul transportation refers to gas that is received by the Mainline at Empress, Alberta, or in Saskatchewan, and transported to a point in Eastern Canada. In contrast, short-haul transportation generally refers to gas received by the Mainline at locations other than Empress, or a Saskatchewan receipt point, for onward transportation.

FT refers to gas transported by the Mainline under contracts with a one-year minimum term under which a shipper's contracted quantity of gas cannot be curtailed or interrupted, except in exceptional circumstances. In essence, when contracting for FT, a shipper reserves capacity on the Mainline for the contracted quantity of gas from a specified receipt point to a specified delivery point or area. In return, the shipper must pay TransCanada for the transportation service it purchased irrespective of whether the shipper uses the Mainline to transport gas.

The decline in long-haul FT is evident when comparing the amount of long-haul FT in 1998 to the amount in 2011. In 1998, the Mainline had about 7,200 terajoules per day (TJ/d) of long-haul firm contracts. By 2011, that number had decreased to 1,200 TJ/d of long-haul firm contracts. Figure 2-8 shows this decline.

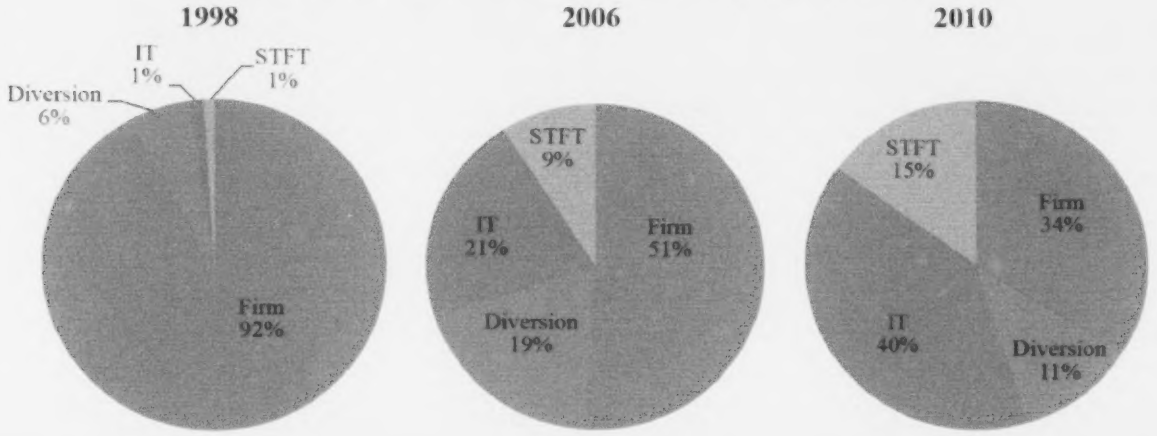
Figure 2-8 Mainline Annual Firm Contract Demand by Path Type



Mainline shippers are transporting a greater share of long-haul volumes from western Canada under discretionary services instead of annual firm service. Discretionary services offered by the Mainline include STFT service and IT service. The Mainline makes these services available on paths where there is available capacity.

Figure 2-9 illustrates how STFT and IT services have increased from 1998 to 2010.

Figure 2-9 Deliveries under Firm and Other Services

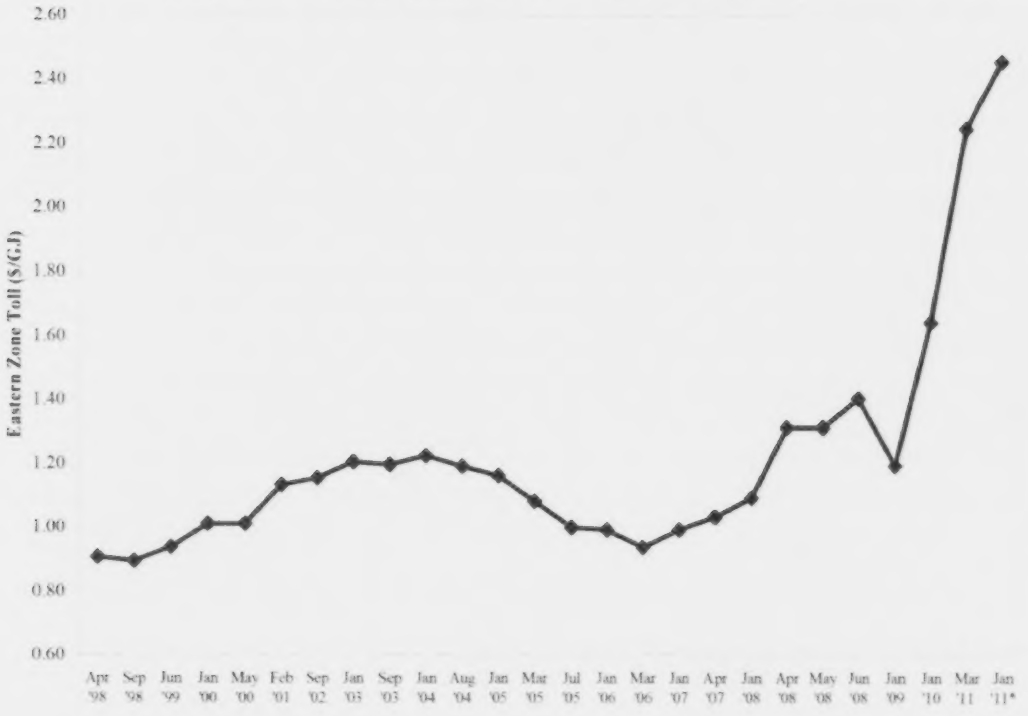


Given the amount of current available capacity on the Mainline system, shippers are able to contract for short-term services to meet their transportation needs without contracting long-term.

2.3.6 Increased Mainline Tolls

Mainline tolls have increased in recent years under its current cost of service methodology. Under its current methodology, tolls are set at an amount that collects sufficient revenue to cover the Mainline's forecast cost of providing service including a return on its investment. This amount is then recovered from shippers based on the amount of gas they contracted for and transport, and the distance that the gas is transported. Costs on the Mainline have declined in recent years; however, the rate at which Mainline costs have declined has not matched the rate in which the amount of gas contracted has declined, and the distance it travels or is contracted to travel. As a result, Mainline tolls have increased. Figure 2-10 shows the increase in long-haul Mainline tolls to the Eastern Zone.

Figure 2-10 Mainline FT Eastern Zone Tolls



*Note: The Jan 2011 toll is reflective of the Annualized Eastern Zone toll as applied for on April 29, 2011 in the 2011 Final Tolls Application

2.4 The Restructuring Proposal

The TransCanada Business and Services Restructuring Proposal (Restructuring Proposal or RP) is TransCanada's response to recent changes in the Mainline's business environment. TransCanada indicated the primary objective of the Restructuring Proposal is to enhance the long-term economic viability of the Mainline and the WCSB through material reductions in the costs of transportation services to ex-WCSB markets. The Restructuring Proposal consists of four main elements:

1. The ASE – this involves NOVA contracting for gas transportation service on the Mainline and the Foothills System through TBO agreements. It would extend the Alberta System to the Saskatchewan/Manitoba Border (SMB) on the Mainline, and to the Saskatchewan/U.S. border near Monchy, Saskatchewan and the B.C./U.S. border near Kingsgate, B.C. on the Foothills System. The details are discussed in Chapter 6.

2. The Depreciation Proposal – this entails the continued use of segmented depreciation, with updated Economic Planning Horizon(s) (EPH), and the reallocation of accumulated depreciation among the Prairies, NOL and Eastern Triangle segments of the Mainline. The details are discussed in Chapter 5.

3. Toll Design changes – this entails eliminating toll zones, changing how Mainline costs are allocated, and revising certain aspects of the Mainline's toll design. Toll design changes are discussed in detail in Chapter 7.

4. Services and Pricing changes – this includes the elimination of certain services, changes to maximum bid floors for IT and STFT and the introduction of a multi-year fixed price service, among other service changes. Services and pricing changes are discussed in detail in Chapter 8.

TransCanada requested approval of final Mainline tolls for 2012 and 2013. The Application, as revised, included 2012 and 2013 proposed tolls under the Restructuring Proposal and under TransCanada's existing tolling methodology (Status Quo or SQ). Table 2-1 compares the applied-for 2013 tolls under the Restructuring Proposal with the tolls under the Status Quo from three different receipt points to the Union Southwest Delivery Area (SWDA) and the Enbridge Central Delivery Area (CDA).

Table 2-1 Comparison of 2013 Tolls under the Restructuring Proposal and Status Quo ($/GJ)

Toll Path	2013 RP	2013 SQ
Sask./Man. Border to Dawn, Ontario (Union SWDA)	1.18	-
Sask./Man. Border to Toronto, Ontario (Enbridge CDA)	1.33	-
Alberta System to Dawn (Union SWDA)	1.47	2.74
Alberta System to Toronto (Enbridge CDA)	1.61	3.18
Alberta/Sask. Border (Empress, AB) to Dawn (Union SWDA)	1.52	2.58
Alberta/Sask. Border (Empress, AB) to Toronto (Enbridge CDA)	1.67	3.03

2.5 Overview of Intervenor Proposals

Many Intervenors opposed the Restructuring Proposal completely or in part. Some Intervenors submitted their own proposals to address the challenges facing the Mainline. Like the Restructuring Proposal, most Intervenor proposals would result in a reduction in Mainline tolls, in either the short-term or long-term. However, the Intervenors generally differ from TransCanada, and each other, regarding the mechanisms that should be used to reduce tolls on the Mainline. Brief summaries of the more comprehensive Intervenor proposals are set out in the following subsections.

2.5.1 Association of Power Producers of Ontario

The Association of Power Producers of Ontario (APPrO) proposed an Alternative Tolling Methodology (ATM), which originally included removing 40 per cent or $2.2 billion of underutilized assets from the Mainline's rate base[2] and securitizing those assets with either government-sponsored debt or other higher-cost debt. APPrO later updated its proposal to remove 55 per cent or $3.0 billion from rate base. The ATM also includes using a longer

[2] Rate base represents the total investment in a pipeline.

depreciation length for the Mainline as a whole, phasing out all TBO agreements on the Mainline, and reducing the Mainline revenue requirement by $250 million over five years.

2.5.2 Industrial Gas Users Association

The proposal from the Industrial Gas Users Association (IGUA) included removing $1.6 billion of underutilized assets on the Prairies segment and the NOL from rate base, with $800 million of this amount being securitized and the other $800 million being absorbed by TransCanada. IGUA concluded that because no one party is responsible for the underutilized Mainline, a 50/50 sharing of costs between tollpayers and TransCanada shareholders would be appropriate. As an interim measure, until securitization can be implemented, IGUA proposed that for 2012 and 2013 TransCanada be disallowed any ROE on the portion of its rate base deemed not to be used and useful.

2.5.3 Canadian Association of Petroleum Producers

The Canadian Association of Petroleum Producers (CAPP) proposed a multi-year approach to setting Mainline tolls instead of the traditional year-by-year approach used by TransCanada. There are two main components to the CAPP proposal:

1. Tolls would be fixed for a multi-year period with annual revenue surpluses or deficits that arise over the term being placed in a Toll Stabilization Adjustment account (TSA). Based on expected throughput, revenues and cost, CAPP indicated fixing tolls for five years at a level similar to the tolls under TransCanada's Restructuring Proposal should be adequate to recover the Mainline's costs of providing service over that period; and

2. TransCanada's depreciation proposal should be rejected. Instead, CAPP proposed that an amount in the range of $100 million per year be removed from the Mainline's revenue requirement until the balance of the TSA is eliminated. These amounts be added to rate base through the proposed Mainline's Long-Term Adjustment Account (LTAA).

2.5.4 Market Area Shippers

The Market Area Shippers (MAS)[3] submitted that the Board should:

1. Remove the equity return associated with the NOL from the revenue requirement each year from 2012 to 2020. Implement an incentive mechanism that allows TransCanada an opportunity to earn back the foregone equity return on the NOL via cost savings over the term of the proposal; and

2. Deny most of TransCanada's proposals, including the transfer of accumulated depreciation from the Prairies and Eastern Triangle to the NOL, changes to cost allocation methodology, the elimination of toll zones, the proposed treatment of TQM TBO costs, the elimination of RAM, and any additions to the LTAA.

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[3] The Market Area Shippers consist of Enbridge Gas Distribution Inc., Union Gas Limited and Société en commandite Gaz Métro.

Chapter 3

Throughput Forecast

TransCanada submitted a throughput study that forecasted Mainline throughputs under different supply and tolling scenarios for the period 2011 to 2020 (Throughput Study). The scenarios used different WCSB supply cases and assumed tolls based on each of the Restructuring Proposal and Status Quo tolling methodologies. The Throughput Study reflected the analysis of TransCanada's market development team and incorporated inputs from publicly available sources, aggregate customer confidential information and internal TransCanada analyses, models and assessments.

TransCanada filed two revisions to the originally submitted Throughput Study during this proceeding: in October 2011 and June 2012, each of which utilized an updated set of underlying data. The Board's analysis of TransCanada's throughput forecast in this chapter is based, where applicable, on the most recent June 2012 Throughput Study update.

Views of TransCanada

To explore what TransCanada viewed as a plausible range of natural gas supply and Mainline throughput outcomes, TransCanada's Throughput Study took into account scenarios for conventional and unconventional WCSB supply, allocation of available supply to ex-WCSB pipelines and demand in both supply and market ends of its systems. The Throughput Study was based on TransCanada's internal 2011 TransCanada Strategic Outlook, an internal corporate planning document. TransCanada used an equilibrium model to forecast the interplay of key forecast factors in the context of a broader view of the entire North American gas market. In aggregate, TransCanada submitted seven cases utilizing three different WCSB supply level scenarios: Base, Low and High. The seven cases are summarized in the Table 3-1.

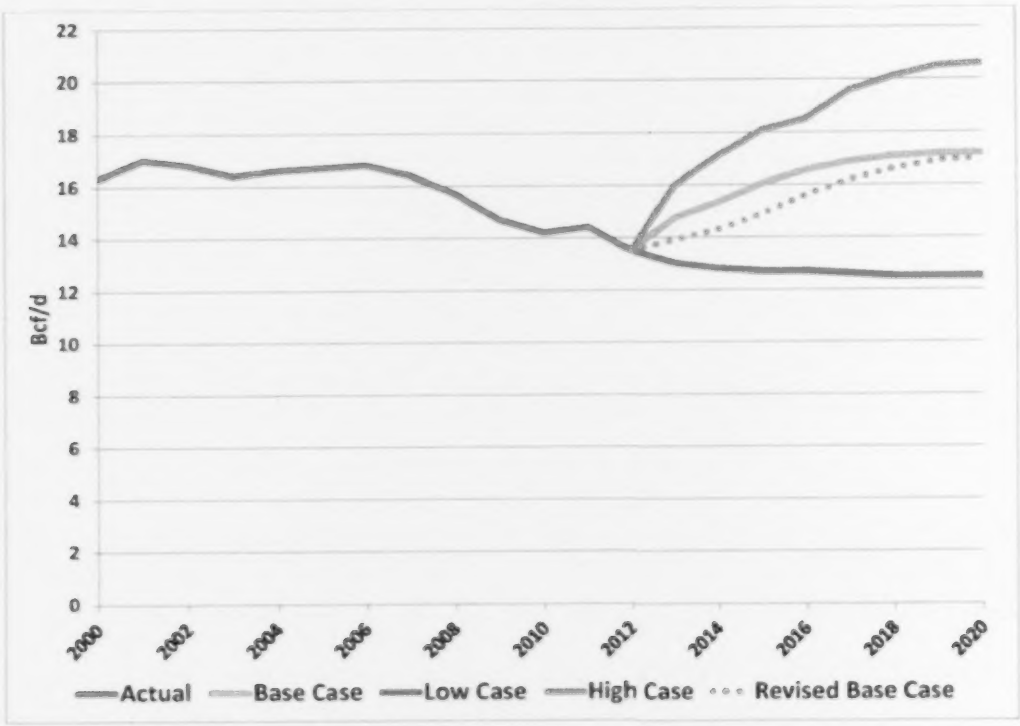
Table 3-1 Throughput Scenarios

Case Number	Case Name	Tolling Structure	Infrastructure and Market Response	WCSB Supply Level
1	Restructuring Proposal	Restructuring Proposal	No	Base
2	Status Quo: No Response	Status Quo	No	Base
3	Status Quo: Response	Status Quo	Yes	Base
4	Restructuring Proposal: Low Supply	Restructuring Proposal	No	Low
5	Status Quo: Low Supply	Status Quo	No	Low

6	Restructuring Proposal: High Supply	Restructuring Proposal	No	High
7	Status Quo: High Supply	Status Quo	No	High

Figure 3-1 shows the WCSB supply forecast out to the year 2020 under the three different scenarios.

Figure 3-1 WCSB Supply Forecast



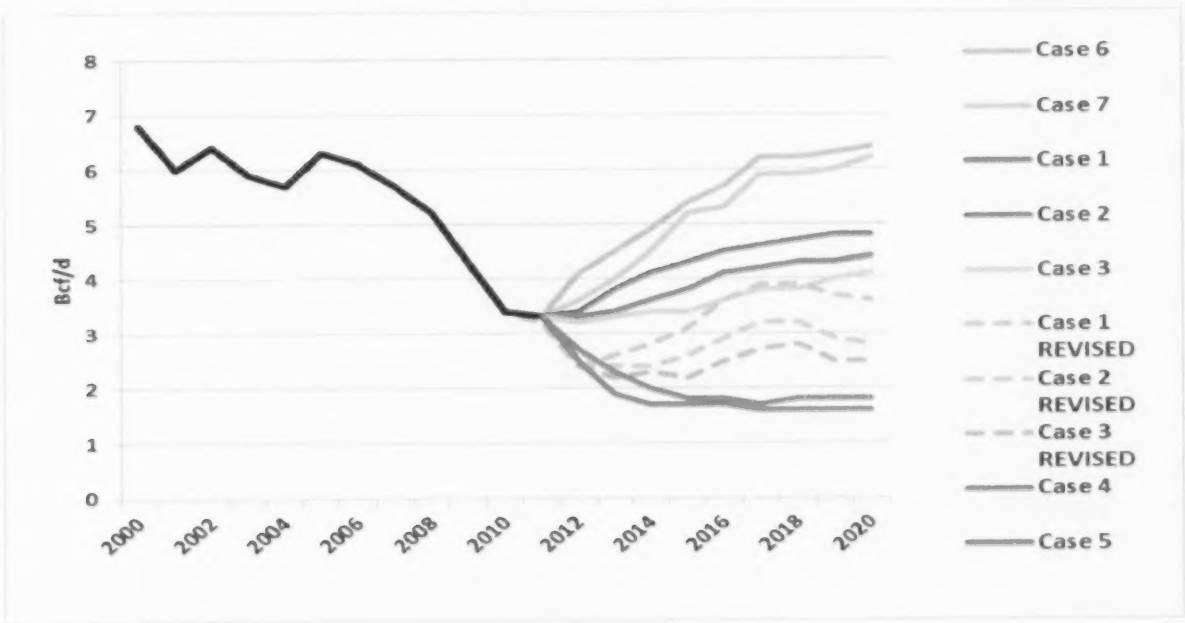
Case 1 evaluated Mainline throughput with a Base Case level of WCSB supply and assumed that tolls were set based on the implementation of the Restructuring Proposal. As originally filed, implementation of the Restructuring Proposal would result in an FT toll from the NOVA Inventory Transfer (NIT) to the Dawn hub of $1.39/GJ, inclusive of fuel costs. TransCanada characterized the Restructuring Proposal as its best proposal to improve the situation of the Mainline. Under Case 1, Mainline western receipts increased from 3.4 Bcf/d (96.3 $10^6m^3/d$) in 2012 to 4.8 Bcf/d (136.0 $10^6m^3/d$) in 2020. TransCanada submitted that with lower Restructuring Proposal tolls relative to the Status Quo, Case 1 resulted in the highest level of Mainline throughput, which averaged 4.3 Bcf/d (121.8 $10^6m^3/d$) for the 2012 to 2020 period.

Case 2 evaluated Mainline throughput with a Base Case level of WCSB supply and assumed that tolls were set at Status Quo levels. Maintenance of the Status Quo would result in an FT toll from NIT to Dawn of $2.43/GJ, inclusive of fuel. TransCanada developed Case 2 to identify and isolate the throughput impact of the Status Quo toll methodology relative to the Restructuring Proposal. Under Case 2, Mainline western receipts increased from 3.3 Bcf/d (93.5 $10^6m^3/d$) in

2012 to 4.4 Bcf/d (124.6 $10^6 m^3/d$) in 2020. During cross-examination, TransCanada submitted that in the event Status Quo tolls were maintained, Case 3 was TransCanada's expected case and the appropriate case to use in assessing Mainline throughput, not Case 2. TransCanada submitted that Case 2 was not representative of the expected throughput response with the Status Quo toll methodology, because it assumed no market response and no new competing infrastructure would be developed in response to the higher Mainline tolls. Case 2 Mainline throughput averaged 3.9 Bcf/d (110.5 $10^6 m^3/d$) for the 2012 to 2020 period.

TransCanada explained that Case 3 considered throughputs where the Status Quo toll methodology was maintained, and where there was an associated market response, including the construction of new competing infrastructure. TransCanada submitted that in an environment where the Status Quo tolling continued, there was an increased risk that new competing infrastructure would be developed that would affect throughput on the Mainline.

Figure 3-2 Cases 1 to 7 Western Mainline Receipts Throughput Forecast



Case 3 throughputs based on Mainline throughput reductions relative to Case 1.

TransCanada submitted that Case 3's impact on Mainline flows could result from different combinations of infrastructure projects. Flow reduction estimates reflected a judgment that some, but not all projects would proceed. TransCanada identified the following infrastructure and market responses associated with Case 3:

- new pipeline capacity/infrastructure into the Ontario and/or Québec markets;
- new capacity/infrastructure, which further reduces exports to the U.S. northeast via the Waddington export point;
- new capacity/infrastructure that could increase reversed flows into Ontario at Niagara and Chippawa;

- new pipeline capacity that leads to increased flows on non-Mainline ex-WCSB pipelines;
- new export capacity from western Canada;
- lower WCSB supply levels caused by reduced western Canada gas price; and
- higher western Canada demand caused by reduced western Canada gas price.

Case 3 assumed some of the flow reduction from new infrastructure would apply to western receipts and some would apply to shorter hauls. The reductions in flow were assumed to average 1,200 km in length of haul. During cross-examination, TransCanada stated that although Case 3 assumed flow reductions to average this length of haul, infrastructure responses were more likely to come from eastern Canada. TransCanada's Throughput Study analysis indicated that in Case 1, for the 2012 to 2017 time period, NIT prices were forecast to increase, on average by $0.13/GJ. During the same period, Alberta System netback prices were forecast to rise by an average of $0.08/GJ.

TransCanada submitted an update to its Throughput Study on 29 June 2012 (revised Throughput Study). Specifically, TransCanada updated forecasts related to Case 1 and Case 2 throughputs, NYMEX and Alberta plant gate gas price forecasts, Mainline throughput reductions associated with Case 3, and revised tolls.

TransCanada's revised Throughput Study indicated an average drop of 1 Bcf/d (28.3 $10^6 m^3/d$) in Mainline western receipts in the revised Cases 1 and 2 relative to the initial Throughput Study. The revised Throughput Study also forecast a lower WCSB Base Case supply. TransCanada submitted that Low and High WCSB supply cases remained reasonable; therefore, it did not change these cases (Cases 4 to 7) in the revised Throughput Study. Regarding Case 3, TransCanada indicated that while it had updated the flow difference relative to Case 1 and 2, it had not prepared a new Case 3 assessment associated with the revised Throughput Study. Updated results indicated that the implementation of the Restructuring Proposal would result in an FT toll from NIT to Dawn of $1.47/GJ; and, that the impact of the Restructuring Proposal on the NIT price was greater than in the previous assessment. The average impact over the 2012 to 2017 period on the NIT prices was $0.17/GJ, compared to a previous assessment of $0.13/GJ. Unlike the initial Throughput Study, the revised Throughput Study incorporated LNG exports from western Canada, commencing in 2018.

In addition to its own Throughput Study, TransCanada also submitted evidence of Mr. Fleck from Wood Mackenzie, who provided an independent assessment of the likely impacts on natural gas prices resulting from the implementation of the Restructuring Proposal. Wood Mackenzie undertook the quantitative analysis using its Spring 2011 Base Case as the foundation of modeling efforts to evaluate TransCanada's Restructuring Proposal. Wood Mackenzie's analysis concluded that the implementation of the Restructuring Proposal would result in a 16 per cent average increase in gas flows to the east on the Mainline through 2017 relative to the Status Quo. Furthermore, the Wood Mackenzie model demonstrated that the price of gas at NIT increased by an average of $0.14/GJ relative to the Status Quo; and, that the Alberta System plant gate price would increase by an average of $0.08/GJ relative to the Status Quo, through 2017.

Following the submission of TransCanada's revised Throughput Study and amended tolls, Wood Mackenzie also revised its analysis in June 2012. The updated run of Wood Mackenzie's model indicated an average NIT price increase of $0.11/GJ between 2013 and 2017, as compared to $0.17/GJ by TransCanada. Mr. Fleck emphasized that although the NIT price uplift is less than TransCanada's, directionally it is an increase.

During cross-examination, Mr. Fleck identified several differences between Wood Mackenzie's forecasting results and those of TransCanada. These differences included Wood Mackenzie's larger projected increases in WCSB supply, larger increases in Marcellus supply, smaller increases in the volumes of gas flowing on the Mainline between 2012 and 2016, lower LNG export volumes from western Canada and a later startup date of west coast LNG exports.

In its modeling efforts, TransCanada assumed FT contracts would stay flat into the future, because although the contract levels are currently lower than they have been in the past, throughputs were generally expected to go up due to increasing WCSB supply. Should the Restructuring Proposal be implemented, TransCanada indicated that additional new FT contracts are likely to materialize. In an undertaking response, TransCanada advised that for the 2013 gas year, 84 per cent of long-haul contracts were renewed and 94 per cent of eastern short-haul contracts were renewed. Overall, 86 per cent of total contracts on the Mainline were renewed for the 2013 gas year.

During cross-examination, TransCanada indicated it did not run the model to test how toll changes would impact flows and prices. TransCanada witnesses and Mr. Fleck agreed that in general, the larger the toll reduction from the Status Quo tolls, the greater the impact on flows and prices.

TransCanada indicated that, even with the implementation of the Restructuring Proposal, throughput on the Mainline was unlikely to return to full base load levels. TransCanada's vision for the Mainline was to maintain a reasonable base load of long-haul throughput, while a significant portion of the Mainline's business would come from long-haul continuing to be used as a seasonal peaking service where flows are higher during the winter months due to higher demand in the Mainline's traditional eastern Canadian and northeastern U.S. market areas.

TransCanada submitted the Eastern Triangle is very healthy. TransCanada further indicated that it is generally running at full capacity and will continue to play an important role for the company. In the future, it will provide increasing market access for new shale plays such as the Marcellus and the Ohio Utica.

Views of Intervenors

CAPP

CAPP accepted the Throughput Study for the purposes of the CAPP proposal, although it acknowledged that the throughput forecast was challenging. CAPP stated it had difficulty linking the TransCanada throughput forecast with the evidence on throughput submitted by Dr. Carpenter, a witness for TransCanada. CAPP submitted that future projects in eastern markets might bring a Bcf/d of gas into Ontario by 2015, displacing additional long-haul volumes on the Mainline. Overall, however, CAPP emphasized that TransCanada's forecast was not unreasonable.

CAPP submitted that while it does perform supply forecasts, it does not model pipeline flows, and, while it sees TransCanada's throughput forecast as challenging, it does not have an alternative view. CAPP submitted that TransCanada's forecast was appropriate to use for the CAPP proposal, because TransCanada was in the best position to know its markets, supply scenarios and service offerings. Finally, CAPP saw potential for an increase in Mainline throughputs given the vast resource base of the WCSB and the prospects of demand growth in North America.

CAPP's expert witness, Dr. Booth, stated that he is not entirely confident in TransCanada's forecast. In his view, the U.S. will continue to be reliant on Canadian imports of natural gas, particularly as LNG exports from the U.S. commence. On the other hand, Dr. Booth submitted that as markets adjust, natural gas prices would rebound, to better equalize energy equivalences of oil prices. In such scenarios, throughputs on the Mainline would appear to be more optimistic. Overall, Dr. Booth submitted that while TransCanada's supply forecast shows throughput improvements since the Board's decision in Trans Québec and Maritimes Pipelines RH-1-2008, there is more uncertainty surrounding this forecast.

CAPP agreed with TransCanada's vision for the Mainline, to the effect that long-haul service has become a seasonal and peaking service, while eastern short-haul will increase.

Talisman Energy Inc. (Talisman)

Talisman argued there would be no positive impact on the NIT price if the Restructuring Proposal were approved, because although modeling efforts might provide broad trends, they cannot provide absolute numbers, and particularly not to a level of precision suggested by TransCanada. Talisman submitted that, since TransCanada would not provide the inputs and assumptions used in its models, one cannot place any reliance on their forecasted outputs.

Talisman also referred to Mr. Henning's modeling efforts, on behalf of MAS, which indicated for every dollar reduction in the long-haul Mainline toll, the NIT price would be expected to rise by $0.40/GJ. Talisman argued Mr. Henning's NIT price impact analysis should not be given much weight, because like TransCanada, he did not provide specific modeling assumptions or methodologies. Moreover, given the wide inconsistency between the NIT price impacts

submitted by TransCanada, Wood Mackenzie and Mr. Henning, this in and of itself indicates the impacts on the NIT price should not be given much weight.

Talisman further argued that TransCanada's modeling efforts do not reflect real world details and other commercial realities. These include shippers' non-economic decisions such as desire for supply source diversification, transportation path diversity, contract term objectives or service flexibility requirements. Talisman indicated that TransCanada's submission that 100 per cent of FT contracts will be renewed at 100 per cent of current contract capacity each year throughout the forecast period to 2020 does not reflect real world decision-making process. Talisman submitted this is particularly unrealistic in light of MAS' testimony regarding their future plans on gas procurement.

MAS

MAS submitted that they are subject to regulatory prudency reviews by provincial regulators and therefore have an obligation to seek least cost supplies. MAS indicated that they are planning or already making efforts to acquire more natural gas supply at Dawn at the expense of long-haul gas deliveries from the WCSB. Overall, MAS submitted that security of supply implications are important for local distribution companies (LDCs), and that WCSB supply will continue to be an important component of supply portfolios, although it is likely to be reduced.

Mr. Henning, an expert witness for MAS, provided an alternative estimate of the NIT price increase that is expected to be equal to about 40 per cent of the total reduction of long-haul tolls.

Further, MAS indicated that an opportunity existed to increase the utilization of the Eastern Triangle by re-exporting gas from the Marcellus and Ohio Utica. They cautioned though that this gas would only be available to the Mainline if the proper price signals existed to incent shippers to move their gas on the Mainline and not build competing infrastructure to access the New England market.

Alberta Northeast Gas, Limited (ANE)

ANE specifically noted that the portion of the pipeline from Empress to eastern Canada will continue to provide a level of base load long-haul service for captive customers and a more significant portion of its throughput as a winter peaking load.

ANE also noted that it is encouraged by new flows from the Marcellus potentially going into the Eastern Triangle and strengthening it by contributing to toll stability. They indicated that if the Marcellus were to enter the TransCanada system through Dawn then it could be re-exported into the New England market and that would be a more preferable option to building new pipeline infrastructure in the New England area.

TransCanada's Reply

In response to some intervenors' submissions that they were unable to verify TransCanada's throughput results, TransCanada argued that it had provided sufficient information on the record to permit parties with either the same or a different equilibrium model to replicate TransCanada's results. TransCanada argued that both it and Wood Mackenzie independently obtained directionally similar results and other parties using similar information and a similar approach would also obtain corroborating results.

Overall, TransCanada contended that economic theory states that should tolls between supply and market areas decrease, NIT prices will rise and market prices will fall. Moreover, TransCanada argued the Board should not give weight to intervenors' critique of the Throughput Study, particularly if those intervenors chose not to provide alternative results.

Views of the Board

We agree with TransCanada that a sufficient number of throughput cases were studied to provide a reasonable range of scenarios for the Mainline going forward to 2020. On numerous occasions, TransCanada indicated that of the supply scenarios submitted, the revised Base Case supply reflected what it considered to be the most likely supply conditions in the WCSB over the forecast period. Independent analysis and testimony of Wood Mackenzie, although not identical to TransCanada's forecasts, indicated directionally similar results on the range of possible throughput cases. We note that no other party submitted alternative throughput or supply projections or provided arguments that persuaded us that TransCanada's Throughput Study is unreasonable.

We find Case 1 throughputs to be the most probable to materialize once this Decision is implemented, subject to the impacts discussed below of the additional pricing flexibility being given to TransCanada. We note that the multi-year fixed tolls we are establishing in this Decision, as explained in Chapter 12, are above, but relatively close to, the Restructuring Proposal FT tolls filed and modeled by TransCanada.[4] We also believe, given numerous parties' submissions on the importance of stable and predictable tolls and the uncertainty surrounding post-2013 toll levels, that setting multi-year fixed tolls will mitigate some of the impact of establishing higher fixed tolls than contemplated under the Restructuring Proposal and modeled in Case 1. This corroborates our view that Case 1 throughputs are the most probable to materialize.

This Decision allows a higher level of pricing flexibility for discretionary services than that modeled by TransCanada in the Throughput Study. The manner in which actual throughput on the Mainline will be impacted by this higher level of pricing discretion was not modeled. Notwithstanding, we find that it is appropriate to rely on Case 1 when considering multi-year fixed tolls as set out in Chapter 12, given that we are of the view

[4] The RP tolls on some paths, namely from Empress, Alberta, are higher than the multi-year fixed tolls we are establishing. However, because of the proposed structure of the ASE embedded in the RP, the RP tolls from Empress are not representative of the RP long-haul tolls. This is illustrated by the fact that the RP toll from NIT to Dawn (inclusive of the Alberta System delivery toll), for example, is lower than the RP toll from Empress to Dawn (which does not include the Alberta System delivery toll). Accordingly, in order to meaningfully compare the RP toll levels with the long-haul toll levels we are establishing in this Decision, we consider the RP tolls from the Alberta System or NIT, rather than Empress.

that throughput uncertainty related to this pricing flexibility does not contribute to the risk of lower revenues for the Mainline. Regardless of its impact on throughput, more pricing flexibility gives TransCanada the opportunity to generate more revenues.

We recognize that in general, forecasts are inherently uncertain and inputs are often subjective. The materialization of the Case 1 throughput forecast is not without risk, be it under the Restructuring Proposal as filed by TransCanada or with multi-year fixed tolls and additional flexibility granted to TransCanada by this Decision. These risks may include natural gas commodity price volatility, production costs in competing basins, diversity of supply considerations of eastern consumers and decisions to pursue supply-pushed bypass projects as identified by TransCanada in Case 3. While we recognize that TransCanada has limited influence over some of these risks, this situation is also the reality of all firms facing competition. TransCanada is expected to take proactive actions to manage these risks.

Chapter 4

Rate Base and Cost Recovery

Rate base represents total investment made in a pipeline system. It is used to compute the return component of the revenue requirement, which permits the pipeline owner to earn a return on its investment.

Evidence was presented in this proceeding to the effect that the cost structure of the Mainline was too high to be supported by the low billing determinants now on the Mainline. In other words, tolls are too high. IGUA and APPrO suggested that a portion of costs included in rate base should be disallowed. APPrO recommended a securitization mechanism that enabled TransCanada to recover all Mainline investment that would be disallowed from rate base, while IGUA's securitization proposal would have allowed TransCanada to recover half of the investment disallowed, and required its shareholders to absorb the other half. MAS proposed to disallow the ROE on the NOL. IGUA proposed a similar approach as MAS as an interim measure for 2012 and 2013, until a securitization program was ready to be implemented.

This chapter discusses regulatory standards for cost recovery and whether any return on or of invested capital should be disallowed. In doing so, a determination is made as to the relevance, if any, of the concept of a regulatory compact in the financial regulation of the Mainline. The extent to which TransCanada has been compensated for the risk of underutilization or un-utilization is also addressed. Finally, the specific securitization proposals are considered at the end of this chapter.

4.1 Regulatory Compact and Recovery of Capital

Views of TransCanada

TransCanada requested approval of an average rate base amount of $5,823.7 million for the 2012 Test Year and $5,794.8 million for the 2013 Test Year. TransCanada submitted that all Mainline investment was made in facilities that are in place and operating pursuant to Board approval. TransCanada stated that the NEB authorizes facilities to be constructed when it finds them to be required by the present and future public convenience and necessity, after having regard for supply, markets, economic feasibility, financing and any public interest that may be affected.

TransCanada submitted that all costs included in the Mainline rate base have been found by the Board to have been prudently incurred. It further submitted that it has acted prudently in the physical operation and commercial management of its pipeline systems. TransCanada also submitted that all Mainline facilities remain used and useful in the integrated operation of TransCanada's pipeline systems for the benefit of all shippers.

TransCanada submitted that the Board assesses prudence of the incurrence of capital costs at the time it approves the construction of facilities and assesses the prudence of the level of capital

costs at the time that the facilities are placed into service. TransCanada did not refer the Board to any decisions that expressly found its investments in the Mainline prudent. Instead, TransCanada noted that its submission of how the Board determines prudence is consistent with the Board's RH-2-76 Decision.[5] TransCanada stated that it understands that continued inclusion in rate base is not determinative of recovery of prudently incurred costs. Rather, assets that are no longer used and useful in the provision of service are retired and may be abandoned, but the prudently incurred costs of such assets continue to be recovered.

TransCanada indicated that the Board's original finding of prudence, not the used and useful regulatory standard, determines cost recovery. In TransCanada's view, even if an asset is excluded from rate base, for example, because the asset is not used and useful, TransCanada is entitled to earn a return on and of investment in that asset. TransCanada submitted that intervenor proposals that did not allow TransCanada an opportunity to earn a return on and of prudently incurred investment would be contrary to the regulatory compact and confiscatory.

TransCanada submitted that the regulatory compact required that the Board establish tolls that provide TransCanada with a reasonable opportunity to earn a return on its prudently incurred investment and to recover its investment over a reasonable period. TransCanada submitted that changing the terms of the regulatory compact midstream in the face of changed circumstances to let the company bear losses that the Board had the power to avoid could materially raise the cost of capital for all regulated industries in Canada. In the view of TransCanada, even in a scenario where setting tolls based on full recovery of cost of service would lead to a "tolling spiral", the fundamental bargain of the regulatory compact should be preserved. TransCanada argued that if faced with a situation where the Board thought that tolls that continue to provide a reasonable opportunity to recover prudently incurred costs were not sustainable, the Board would still have to set tolls at the level that would maintain the opportunity to recover prudently incurred costs, and whether those tolls worked in the market would be TransCanada's problem.

TransCanada stated that it was not aware of any Canadian regulatory or legal precedent for the denial of recovery of the prudently incurred costs of utility assets that continue to be used in the provision of service. Nor was it aware of any Board decisions that deny recovery of prudently incurred capital costs of assets that are no longer used and useful. TransCanada stated that the Board does not need to look at precedents in the U.S. as suggested by intervenors and as discussed in more detail in Chapter 9 of this Decision. Rather, Canadian law and Canadian precedents should inform the Board's decision on this matter.

TransCanada acknowledged that the Mainline has, on some pipeline segments, more capacity than the volumes that are presently contracted and nominated for transportation on an average day and also has some compressor facilities that do not operate at historical levels. TransCanada stated that it forecasts that it will retire some compressor facilities in 2012 and 2013. In TransCanada's view, the fact that certain pipeline segments and compressor facilities are not continuously utilized at maximum capabilities does not mean that such facilities are no longer used and useful. The entire capacity continues to be utilized and contributes to TransCanada's ability to meet transportation demands on peak days, minimize fuel consumption, and ensure system reliability and security of supply.

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[5] National Energy Board, RH-2-76, Reasons for Decision, Interprovincial Pipe Line Limited, Tariff and Tolls, December 1977.

Concerning the issue of rate base write-downs, TransCanada argued that there is a serious question about whether the Board has the power to order a write-down or require a contribution from shareholders, as proposed by certain intervenors. TransCanada submitted that the NEB Act contains no provision that expressly empowers the NEB to order a write-down of the assets of a pipeline subject to its jurisdiction. Nor is there any provision in the *Gas Pipeline Uniform Accounting Regulations* (GPUAR)[6] that expressly empowers the Board to order a write-down. On the other hand, TransCanada acknowledged that there is no provision in the GPUAR that requires a loss resulting from an extraordinary retirement to be recovered in tolls.

TransCanada's position was that an order of the Board that created a *de facto* write-down of Mainline rate base, or eliminated costs that the Board has already determined to have been prudently incurred, would constitute a confiscation or expropriation by the Board of TransCanada's private property. Relying on the Supreme Court of Canada's decision in the *ATCO Gas and Pipelines v. Alberta (Energy and Utilities Board)* (Stores Block),[7] TransCanada contended that it would be wrong in law to interpret the NEB Act as conferring on the Board the implicit power to confiscate or expropriate.

TransCanada's definition of stranded asset was a situation where the costs were prudently incurred and are recoverable under a regulated environment, but that may not be recoverable in a competitive environment. In such a situation, the Board would establish just and reasonable tolls but the marketplace would not allow TransCanada to charge these tolls and recover its costs. According to TransCanada, a stranded asset determination would be made by the company and various proposals could be presented to the regulator on how to deal with these costs, such as securitization, exit fees or taxation. TransCanada also noted that it would be within the Board's jurisdiction to determine that assets are stranded and to not include related costs in tolls that would be just and reasonable. The determination of whether such a finding is within the regulatory compact would depend whether there is alternative means to recover these stranded costs.

Views of Intervenors

APPrO

APPrO proposed an ATM that included the securitization of underutilized assets. Under the ATM, 55 per cent of TransCanada's net pipeline investment cost, or $3.0 billion, would be removed from rate base and from the calculation of depreciation expense. APPrO argued that TransCanada should be directed to file proposed tolls for 2013, which are calculated based on removal of $3.0 billion from its rate base, which would put the proper incentives in place for TransCanada to develop a securitization proposal. Further details about the securitization aspects are explained in the last section of this chapter.

APPrO submitted that the first step in setting just and reasonable FT tolls is to establish a cost of service for toll-making purposes that reflects the proportion of historical costs underlying the capacity in fact being used to provide FT service. APPrO was of the view that it would not be

[6] S.O.R./83-190.

[7] [2006] 1 S.C.R. 140, 2006 SCC 4.

just and reasonable to burden remaining shippers with the full costs of a system that is only partially engaged to provide services and has little prospect of returning to its previous volumes. APPrO submitted that its proposed solution is not confiscatory because the $3.0 billion in underutilized rate base would be returned to TransCanada, primarily through a securitization.

APPrO agreed that the regulatory compact allows TransCanada the opportunity to recover a fair return but indicated that the regulatory compact does not guarantee complete protection from adverse business conditions, nor does it absolve the pipeline from considering the impact of its proposals on tolls and shippers. According to APPrO, regulation over natural gas pipeline monopolies such as TransCanada was imposed for the benefit of shippers; it was not imposed to assure the recovery of all pipeline costs as TransCanada submitted. APPrO stated that disciplining the pipeline through cost disallowances is a tool available to the regulators and there is no bargain with the pipeline that prevents its use. In that regard, APPrO argued that it is not up to TransCanada to decide when they can make a profit by taking something out of service and selling it, or leaving it in rate base and continuing to collect economic rent on it. According to APPrO, this cannot be the right interpretation of *Stores Block*.

According to APPrO, stranded capacity is the equivalent of economic obsolescence, which is one step further than underutilization.

CAPP

CAPP interpreted the regulatory compact as being the traditional NEB cost of service method of regulation that establishes cost based tolls for a pipeline annually based on forecast costs, including deferral accounts and allowing for the potential for significant components of costs carried forward to the subsequent years. However, CAPP stated that the regulatory compact does not protect a pipeline from changes in supply, markets or competition that impact its ability to recover all its costs in tolls.

CAPP submitted that the Northern Ontario Line 2 is not needed and there is no reasonable prospect of it being needed again in gas service. Accordingly, TransCanada should devise a plan to deactivate or decommission the entire Line 2. Other than Line 2, CAPP did not propose that any specific assets be identified as unnecessary for natural gas transportation service, but noted that the day may be coming when this determination cannot be avoided. Apache Canada Ltd. (Apache), Enerplus Corporation (Enerplus) and Husky Energy Marketing, Inc. (Husky) agreed with CAPP that Line 2 should be deactivated.

CAPP submitted that *Stores Block* emphasizes that the pipeline owner bears all of the risks of the assets that it owns. CAPP contended *Stores Block* lays the foundation for the view that when plant is no longer needed to provide regulated service, it should be removed from rate base. CAPP submitted that it accepted TransCanada's view that the Mainline is not at the point where plant needs to be removed from rate base. It noted, among other things, that TransCanada forecasted increased throughput on the Mainline.

CAPP submitted that the Supreme Court of Canada in *Stores Block* relied on U.S. jurisprudence that disallows a recovery on and of investment. CAPP noted that the U.S. Supreme Court's

decision in the *Market Street Railway Co. v. Railroad Commission of State of California et al* (Market Street Railway)[8] upheld a decision that reduced rates in a context where the street car company was losing business to competition and losing customers under its current rate. In this context, the U.S. Supreme Court found that that there was no duty to set rates that fully recovered costs, including the cost of capital when the enterprise "has passed its zenith of opportunity and usefulness, where investment is already impaired by economic forces, and whose earning possibilities are already invaded by competition." CAPP pointed out no assets were identified as not used and useful and the regulator set a toll based on judgment as to what might improve the situation. The U.S. Supreme Court, CAPP contended, did not find confiscation although the utility was left with a loss and found the Fair Return Standard, as described in *Federal Power Commission v. Hope Natural Gas Co.*,[9] as inapplicable.

On the question of stranded investments, CAPP indicated that based on the Case 1 throughput forecast, it was premature to declare the Mainline a case of stranded investment. CAPP believed that the Mainline should be provided the opportunity to win back long-haul volumes with tolls at the level proposed in the Restructuring Proposal. CAPP was of the view that a determination of whether assets are stranded would be a decision for the Board to make including the manner in which these investments should be treated. According to CAPP, in order to make such a determination, the Board would need to determine the amount of costs to be recovered over the remaining economic life of the Mainline and evaluate whether the market could support the tolls needed to recover these costs over this economic life.

IGUA

IGUA recommended that the NEB remove from rate base, for the purposes of calculating tolls, that portion of rate base that is underutilized. IGUA submitted that the resulting tolls would place the Mainline on a more competitive and sustainable footing. IGUA stated that the capital reduction should be shared 50/50 between TransCanada's shareholders and Mainline shippers. To support its proposal, IGUA provided evidence showing U.S. utilities sharing the cost of underutilization with their shippers. The specifics of this evidence are addressed in Chapter 9.

As an interim measure, IGUA proposed that for 2012 and 2013, TransCanada be disallowed any ROE on 62 per cent of the value of the assets on the NOL and the Prairies Line.

IGUA was of the view that the Restructuring Proposal did not adequately deal with the cost structure of the Mainline, which can no longer be supported by the declining volumes on the pipeline. IGUA disagreed with TransCanada's logic that as long as there is one Mainline shipper remaining who is prepared to pay tolls that fully recover the Mainline's annual cost of service, then those tolls are sustainable and the Mainline remains viable. IGUA also stated that TransCanada must be prepared to accept some responsibility for the imbalance between costs and volumes. IGUA disagreed with TransCanada's assertion that once an investment has been found to be prudently incurred, recovery of this investment should be allowed at 100 per cent regardless of whether it becomes not used or useful.

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[8] 324 U.S. 548 (1945).

[9] 320 U.S. 591 (1944).

MAS

MAS agreed that TransCanada must be provided with a reasonable opportunity to earn a fair return on and of prudently incurred costs. However, according to MAS, the regulatory compact in Canada is nothing more than a concept reflecting the statutory balance that regulatory bodies must strike between, on the one hand, the regulated entity's interests and, on the other hand, the interests of its customers, in approving just and reasonable tolls. MAS stated that it is unreasonable, both as a regulatory matter and as a reflection of the capital market's view, to think that the Board would insulate TransCanada from any effects of competition for gas supply in all circumstances.

As part of its Alternative Proposal, MAS proposed that the equity return associated with the NOL be removed from the revenue requirement in each year from 2012 to 2020. MAS stated that this element recognizes that the NOL is not, nor is it likely to become, sufficiently utilized during this period. MAS also proposed that TransCanada keep some of the savings it achieves with regard to Operations, Maintenance and Administrative (OM&A) and debt capital costs, to allow TransCanada to offset some of the equity return that TransCanada would not earn on NOL assets. Société en commandite Gaz Métro (Gaz Métro) and Union argued that the MAS Alternative Proposal was in line with NEB precedent and case law including the RH-1-77 Decision,[10] *Trans Mountain Pipe Line Company Ltd. v. Canada (National Energy Board)* (Trans Mountain)[11] and *British Columbia Hydro and Power Authority v. Westcoast Transmission Co. Ltd. et al.* (B.C. Hydro).[12] Specifically, Union argued that the Board has the jurisdiction to implement the MAS Proposal because the breadth of the Board's ratemaking jurisdiction has been upheld by the Federal Court of Appeal since the late 1970s.

Gaz Métro argued that changing market realities could mean giving greater consideration of competitive factors, which would require TransCanada's investors to contribute to the costs related to the underutilization of the Mainline. According to the MAS members, the elimination of the return on capital associated with the NOL should be used solely as an indicator for what would constitute a reasonable contribution by TransCanada investors.

Furthermore, Gaz Métro argued that prudent incurrence is not the sole determination for cost recovery because the Board's jurisprudence shows that over and above the prudence of investments, the ability of a regulated company to recover its cost of service is based on the benefits that its assets will provide to customers. Gaz Métro was of the view that those benefits can be reduced when utilization reaches a low level.

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[10] National Energy Board, RH-1-77, Reasons for Decision, Trans Mountain Pipe Line Company Ltd., Part IV Application, January 1978.

[11] [1979] 2 F.C. 118 (C.A.).

[12] [1981] 2 F.C. 646 (C.A.) leave to appeal refused (1981), 37 N.R. 540n (S.C.C.).

York Energy Centre LP (YEC)

YEC requested that the Board grant the relief sought by APPrO. In this regard, YEC argued that it is not just and reasonable to burden shippers with the full costs of a system that is only partially engaged to provide services, and has little prospect of returning to its previous volumes.

As it relates to the confiscation argument made by TransCanada, YEC stated that no party in the current proceeding was advocating the physical removal of assets from rate base. According to YEC, the confiscation argument by TransCanada was artificial and unsupported. Specifically, YEC submitted that TransCanada chose to make an investment in a regulated industry and the return on that investment is within the Board's oversight.

YEC indicated that the regulatory compact does not specifically pertain to the rights of a utility irrespective of what happens with the operation of the pipeline. YEC argued that there is a significant fluidity to the concept of regulatory compact and it does not remove the Board's ability to ensure that the public interest is met or that tolls must be just and reasonable.

Alberta Department of Energy (ADOE)

ADOE indicated that the regulatory compact exists to ensure that natural gas pipelines are regulated to protect customers from the exercise of monopoly powers and to give the pipelines a reasonable opportunity to recover a fair return. In this context, ADOE believed in the continuing applicability of the regulatory compact and did not believe it would be in the public interest for the Board to depart from the compact now or in the near future.

ADOE stated that it accepts at this time that all of TransCanada's assets in its applied-for rate base remain used and useful. However, ADOE submitted that the Board is entitled to determine whether the assets in a company's rate base are underutilized and whether they should remain in rate base and, in doing so, the Board would not be confiscating the utility's property. Assets can become, ADOE submitted, so underutilized that they can be declared no longer used and useful and that is a matter of the Board's discretion and is within the Board's jurisdiction.

Like CAPP, ADOE was of the view that *Stores Block* stands for the proposition that when assets are no longer used and useful they are to be removed from rate base. ADOE pointed out that this is how *Stores Block* has been interpreted by the Alberta regulator[13] and the Alberta Court of Appeal.[14] ADOE submitted that the regulatory tribunal must remove from rate base investment associated with assets that are no longer used and useful in providing service. ADOE supported CAPP's submission on U.S. jurisprudence and particularly the submissions regarding *Market Street Railway*.

Concerning confiscation, ADOE submitted that the facts of *Stores Block* differ from the facts of the present case. ADOE noted that the Alberta regulator ordered the proceeds of sale of certain utility assets, previously found to be no longer used and useful, should go to the utility's customers. The Supreme Court of Canada decision concerned the idea that giving the proceeds of sale from the utility's property to the utility's customers was confiscation.

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[13] Alberta Utilities Commission, Decision 2012-172, Re. ATCO Electric Ltd, 2011-2012 General Tariff Application Compliance Filing for Directions Arising from AUC Decision 2011-459, (June 22, 2012) at paras. 21-22.

[14] *ATCO Gas and Pipelines Ltd. v. Alberta (Energy and Utilities Board)*, [2008] A.J. No. 566, 2008 ABCA 200 at paras. 27 and 29 (ATCO Carbon), citing *Alberta Power Ltd. v. Alberta (Public Utilities Board)* (1990), 72 Alta. L.R. (2d) 129 (C.A.) at p. 151.

Ministry of Energy for Ontario (Ontario)

Ontario noted that many Mainline compressors are operated at low utilization rates. Ontario supported ADOE's arguments that the NEB has the discretion to consider whether assets are used and useful and whether they should stay in rate base for calculating tolls. Ontario did not request that the Board order specific assets be removed from rate base, but submitted that the Board should consider directing TransCanada to include, in future applications, evidence identifying specific Mainline assets that are used, underutilized or not used at all to facilitate the determination of which assets should continue to be included in the Mainline's rate base.

Position of other Intervenors

According to the Industrial Gas Consumers Association of Alberta (IGCAA), the Western Export Group (WEG), Centra Gas Manitoba, Inc. (Centra) and the Office of the Utilities Consumer Advocate (UCA), the regulatory compact is a balancing act of investors' and consumers' interests by the regulator in determining just and reasonable tolls.

Further, WEG indicated that the regulatory compact is unwritten and evolves over time and Québec was of the view that TransCanada should have a reasonable opportunity to recover its costs but not a guarantee to do so. Québec also submitted that in a situation of overcapacity, all stakeholders should share the costs associated with this overcapacity.

TransCanada's Reply

According to TransCanada, the regulatory compact has promoted investment in utility infrastructure through low cost of capital and depreciation rates which translated in lower tolls for customers. In return, TransCanada was of the view that investors in the utility should have the opportunity to recover all prudently incurred costs and be protected from throughput variations. TransCanada noted that an essential part of this "compact" was that one party cannot take advantages of cost-based tolls when the market could pay more and then abandon the agreement to its benefit when circumstances change such that shippers could pay tolls higher than a fully competitive market.

TransCanada stated that it would be wrong to say that assets once used and useful can never become unused, no longer useful or be removed from rate base, and noted that it has never made such an assertion. TransCanada argued that, under the law, when assets are no longer used and useful, they are retired and the pipeline gets its money back, absent imprudence by the utility.

In response to CAPP, TransCanada argued that *Market Street Railway* is irrelevant. It noted that the case is over 65 years old, is mentioned in passing in a Canadian judgment, deals with a provision of the U.S. Constitution, and with a utility in circumstances that bear no similarity whatsoever to the Mainline. In sum, TransCanada submitted that the Board should ignore *Market Street Railway* and suggested that the relevant question for the Board to consider is whether *Stores Block* operates to constrain the broad interpretation of the NEB's powers as set out in *B.C. Hydro* and *Trans Mountain*, which did not consider confiscation. TransCanada contends *Stores Block* does.

4.2 Fundamental Risk Faced by the Mainline

Views of TransCanada

TransCanada stated that, historically, its allowed returns were lower than they otherwise would have been because TransCanada did not face the risk of year-to-year throughput variations. TransCanada was also not afforded the opportunity to earn higher returns when the value of transportation exceeded the cost of transportation. According to TransCanada, the Board made clear in the RH-1-2002 Decision[15] that TransCanada did not bear the risk of underutilization arising from the non-renewal of contracts. TransCanada was of the view that this Board's conclusion has formed the fundamental premise of all tolls that have been established for the Mainline since then. The impact of any reduced billing determinants has been reflected in tolls: the impact has not been treated as the realization of a risk borne by TransCanada and visited on its shareholders. TransCanada contended that if it were to be impacted by the risk associated with underutilization, then the Board would be imposing the realization of a risk upon TransCanada that it did not bear and for which it was not compensated.

TransCanada was of the view that it would be wrong to assert that TransCanada has borne, or been compensated for, the risk described by some intervernors as "contract non-renewal risk", "underutilization risk" or "throughput risk". TransCanada noted that the Board has acknowledged that regulators may be unable to protect the Mainline if tolls become uncompetitive. However, TransCanada was of the view that this situation where the regulator is unable to protect the Mainline does not correspond to the current circumstances.

TransCanada defined the fundamental risk it bore as a situation where the Mainline would be unable to charge just and reasonable tolls providing full cost recovery because of market-based competition. It was the view of TransCanada that at that point, tolls would be beyond the market's tolerance and customers may go to oil, coal or wood. Only at that point was TransCanada of the view that its shareholders should be impacted.

According to TransCanada, the fact that the Mainline has not yet been "hurt in an earning sense" does not mean that the Mainline did not bear the risk that it may be unable to recover its prudently incurred costs over that period. Uncertainty with respect to business risk continues to represent risk for the Mainline and this risk should be reflected in the determination by the Board of a fair return for the Mainline.

Dr. Kolbe, an expert witness for TransCanada, indicated that under normal conditions, a rate-regulated company expects to earn its allowed rate of return without the possibility of returns substantially more than its allowed return. However, sometimes regulated companies face asymmetric downside risks that are much greater than their upside potential. As it relates to the Mainline, TransCanada never asked for an asymmetric risk premium over and above its cost of capital but rather expected that the Board would make every possible effort to avoid letting the Mainline suffer premature truncation in its investor cash flows. Notwithstanding the above, Dr. Kolbe acknowledged that investments in pipelines are made on terms where the belief is that the asymmetric risk is so small that it is negligible and falls within the normal noise of regulated

[15] National Energy Board, RH-1-2002, Reasons for Decision, TransCanada PipeLines Limited,Tolls and Tariff, July 2003.

operations. However, if the risk changes, a decision will need to be made on how to address this risk.

Further, TransCanada argued that setting tolls at the lower of cost or market on an aggregate basis would amount to confiscation. TransCanada indicated that individual tolls can be set at the lower of cost or market so long as the utility has a reasonable opportunity to recover its prudently incurred costs on an overall basis. According to TransCanada, under a lower of cost or market regime, a significant amount of TransCanada's costs could become stranded and would guarantee that over time, a utility will recover less than its prudently incurred costs and not earn a reasonable return.

Views of Intervenors

APPrO

Dr. Safir, an expert witness for APPrO, was of the view that TransCanada has always earned a rate of return based on an element of business risk reflecting the probability that assets could be underutilized due to changing economic circumstance. Because the potential for economic obsolescence has been embedded in the return structure, Dr. Safir indicated that TransCanada has already been compensated for accepting the risk of much of the underutilized investment now evident on the pipeline system.

Dr. Safir submitted that TransCanada accepted the risk related to the long-term requirement for capacity in exchange for a commensurate rate of return. He stated that the event of this underutilized capacity has essentially materialized, and the burden of it should be borne primarily by the Mainline. In this regard, APPrO suggested that TransCanada should bear a portion of the cost of contract non-renewal by contributing $50 million annually to the revenue requirement of the Mainline.

Dr. Safir indicated that APPrO's ATM would reduce the overall business risk faced by TransCanada. According to Dr. Safir, this would occur as a result of the elimination of the uncertainty regarding the treatment and ultimate recovery of the pipeline's investment in underutilized capital, and that to the extent the Mainline no longer faces such economic uncertainty, the required return on remaining assets in the rate base should be lower.

CAPP

According to CAPP, based on past regulatory precedents, TransCanada can reasonably expect the Board to do its best to protect the Mainline but this should not be taken as a protection from all possible negative outcomes.

As it relates to asymmetric risk, Dr. Booth indicated that it is incorrect to assert that the utility earns its cost of capital except when bad situations occur and the utility loses money. Dr. Booth noted that the Mainline has been earning a risk premium for bearing risk that has not materialized and, as a result, any asymmetry is not in terms of the downside but rather the

opposite, where investors in utilities in Canada get paid a risk premium without bearing any risk because risk is passed on to shippers.

IGUA

According to IGUA, the NEB has awarded TransCanada's shareholders higher returns in the past to compensate for perceived long-term business risk. Now that some of these risks have materialized, IGUA disagreed that TransCanada should be further compensated with a higher cost of capital because shippers have borne all of the increased costs associated with the realization of risks over the past several years.

It was the view of IGUA that TransCanada has not specifically borne throughput risk, and has been compensated accordingly. However, IGUA submitted that TransCanada had been awarded higher returns based on the perception that some long-term risks could materialize. IGUA stated that those long-term risks have become real over the better part of the last ten years.

MAS

According to Dr. Makholm, one of MAS' expert witnesses, recovery by TransCanada of all its prudently incurred costs would mean that its shareholders do not support in any manner the adverse financial consequences of the underutilization of the Mainline. Dr. Makholm was of the view that the circumstances envisioned by the Board in RH-4-2001[16] – throughput decreasing to a point where the resulting tolls exceeded what the market could bear – have materialized given the extreme assessment TransCanada portrays of the current business environment.

Gaz Métro argued that the Mainline's cost structure is resulting in a toll-spiral given its current chronic underutilization and the more competitive market cannot bear the resulting tolls. As a result, Gaz Métro was of the view that all interested parties, including TransCanada, must make a contribution in order to preserve the long-term viability of the Mainline. Gaz Métro stated that this would not constitute an inequitable treatment of TransCanada because TransCanada was compensated for this. According to Gaz Métro, this situation would be the materialization of the risks that TransCanada was facing since 2001.

MAS also indicated that its proposal recognizes that the NOL segment is not expected to be sufficiently utilized until 2020.

TransCanada's Reply

According to TransCanada, the shareholder contribution proposed by some intervenors would have TransCanada bear the impact of the current realization of a past risk that TransCanada did not bear and for which it was not compensated. TransCanada argued that such contributions would violate the regulatory compact by eliminating the opportunity to recover prudently incurred costs and be confiscatory. Regarding the incentive mechanism proposed by MAS to earn back the return on the NOL, TransCanada submitted that this mechanism exaggerates the opportunity for recovery because TransCanada has little ability to manage debt costs and it

[16] National Energy Board, RH-4-2001, Reasons for Decision, TransCanada PipeLines Limited, Cost of Capital, June 2002.

would be impossible to achieve OM&A cost savings to fully compensate for the forgone ROE. TransCanada was of the view that its proposal to defer cash flow is a contribution made by the company because TransCanada has an interest in the competitiveness of the Mainline.

TransCanada indicated that setting Mainline tolls with the purpose of making the tolls competitive and disregarding the underlying costs required to provide the transportation service would be highly subjective and unprincipled tollmaking. According to TransCanada, setting tolls in this manner in the current circumstances when the market value of capacity is less than the tolls on certain paths (even though the market value of Mainline capacity has been much greater than the toll levels in the past), would be inconsistent with the Board's principle of cost-based regulation and would result in a "lower of cost or market" standard. TransCanada was of the view that this approach would be inappropriate and inconsistent with the Board's tolling practices.

Views of the Board

In the paragraphs that follow, we discuss the regulatory compact, regulatory standards for cost recovery, whether the NEB Act and the GPUAR compel the Board to give TransCanada an opportunity to recover all prudently incurred costs in all circumstances, and whether a disallowance of Mainline costs would be confiscatory. We then consider fundamental risks for which TransCanada has been compensated through an allowed return on rate base and whether any costs should be disallowed. Before addressing these topics, we first clarify some terms used in this Decision.

TransCanada argued that the Board does not have the authority to direct or effect a write-down of its rate base. In our view, a "write-down" or a "write-off" are accounting terms that relate to the values at which assets are carried on TransCanada's books and reported for financial purposes. We do not find the terms helpful although we acknowledge that the method of regulation could have an impact on the value at which regulated assets are carried on TransCanada's books. In this Decision, we use the terms "disallowance", "cost disallowance," or "disallowed costs" to refer to a disallowance of a return on or of invested capital from recovery in tolls.

Regulatory Compact

TransCanada, and to some extent other intervenors, have argued that we have to respect the regulatory compact in adjudicating the current case. Based on what we heard in this proceeding, the expression regulatory compact conveys the parties' various and not always consistent interpretations of what cumulatively the relevant legislation, jurisprudence, and past Board decisions would suggest about how we should rule on this Application.

The expression regulatory compact is an expression the Board has not itself specifically articulated. We are not prepared to endorse the concept of the regulatory compact, as a concept that compels the Board to set just and reasonable tolls in a particular manner. In our view, the concept is ill defined. TransCanada's interpretation of the regulatory

compact would have the effect of protecting the Mainline from the impact of competition. Some intervenors contended that the concept protects them from a pipeline's market power. We are of the view that the differing characterizations of the regulatory compact evidences a fundamental flaw in using the concept to set just and reasonable tolls: the regulatory compact means different things to different people.

Further, the regulatory compact as described by the Supreme Court of Canada in *Stores Block* is not directly applicable to TransCanada. The Mainline does not have a franchise area and TransCanada is not compelled by statute to provide service to customers in any area. Certificates of public convenience and necessity confer a right on TransCanada, not an obligation, to construct facilities for gas transportation service. As a result, we do not accept that the "regulatory compact" as described in *Stores Block* provides much assistance about how we should set tolls for the Mainline.

In adjudicating the current Application, we are mandated with establishing just and reasonable tolls, that are not unjustly discriminatory, in accordance with the provisions of the NEB Act.

Regulatory standards for cost recovery

In our view, TransCanada's submission that prudence is a criterion that determines the opportunity for cost recovery has foundation in past Board decisions, authoritative texts on public utility regulation and case law.[17] The same can be said of the "used and useful" regulatory standard.[18] TransCanada and the intervenors both elevate the importance of one regulatory standard over the other in support of their arguments.

In our opinion, the two regulatory standards can be in potential conflict. The used and useful regulatory standard contemplates the potential disallowance of prudently incurred costs if the asset associated with that investment is not used and useful in providing service. It is our view that Canadian courts have not definitively reconciled the two conflicting standards in the context of NEB regulated pipelines. Much of the case law deals with one standard and not the other, or can easily be distinguished, for example, because it was decided in the context of provincial regulators and enactments applicable to them. Moreover, some of the statements made by the courts can be characterized as *obiter*.

The Board's RH-2-76 Decision somewhat reconciles both regulatory standards; however, that decision was made about 40 years ago in a very different set of market and

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[17] A non-exhaustive list of authorities includes: TransCanada PipeLines Ltd. v. Canada (National Energy Board), [2004] F.C.J. No. 654, 2004 FCA 149 at paras. 32 and 43; James C. Bonbright et al. Principles of Public Utility Rates, 2nd ed. (Arlington, Virginia: Public Utilities Reports, Inc. 1988) at pp. 223-224 and 238 (Bonbright); RH-4-2001 at p. 27; National Energy Board, RH-2-2004 Phase II, Reasons for Decision, TransCanada PipeLines Limited, Cost of Capital, April 2005 at p. 43.

[18] A non-exhaustive list of authorities includes: *B.C. Hydro* at para. 53; *ATCO Gas and Pipelines Ltd. v. Alberta (Utilities Commission)* [2009] A.J. No. 713 at para. 28; *ATCO Carbon* at paras. 27 and 29; Bonbright at pp. 257-258; Charles F. Phillips, *The Regulation of Public Utilities*, (Arlington, Virginia: Public Utilities Reports, Inc. 1988) at pp. 301, 302, 325, 326; RH-1-77 at pp. 2-10 to 2-17 and 3-6 to 3-7, aff'd *TransMountain*; National Energy Board, RH-2-97, Reasons for Decision, Westcoast Energy Inc., Tolls, August 1997 at p. 14.

regulatory circumstances. In that decision, the Board made clear that prudence is not the sole criterion for evaluating the amount of plant in rate base and determining whether a pipeline company would earn a return on its invested capital.[19]

In RH-2-76, the Board used a two-part test to determine the amount of plant in rate base. First, the Board examined whether the plant was used and useful in providing service to the public, and second, the Board examined whether the investment in plant was prudently incurred. In the RH-2-76 Decision, there was no suggestion that the investment in the assets was made imprudently. However, the Board disallowed part of the pipeline company's return on investment associated with assets that were not considered used and useful, and accelerated the return of that investment. The decision is silent about whether the used and useful standard can be used to disallow the return of capital.

In our view, TransCanada's submission that only prudence determines the opportunity for cost recovery cannot be sustained in the context of NEB regulated pipelines.

The proposition that only prudence determines the opportunity for cost recovery fails to recognize that tolls and tolling methodology may need to change as the circumstances faced by the pipeline change. We note that the authority conferred on the Board by Parliament to set just and reasonable tolls under the NEB Act is untrammeled by any statutory rules about how the Board reaches that conclusion.[20] In our view, the purpose of that discretion is to allow the Board to adapt tolls and tolling methodology to the context in which pipelines operate. This was noted when Bill C-49 (the Bill that would establish the NEB) was considered in Parliament:[21]

> The Bill does not specify a formula which the board is to apply in examining and, if need be, in setting tolls and tariffs. On the contrary, we are convinced that it would be an error to crystallize in statutory form a single formula to apply to all the companies in either the oil pipe line or the gas pipe line industries. Certainly no single formula would apply to the two industries, where the nature of business and the inherent risks are so different. The circumstances of individual companies differ widely one from another, and the circumstances of the industries as a whole change so substantially over time that any single rigid formula would be found inappropriate almost before it could be applied.

A rule that imposes an obligation upon the Board to approve tolls that allow recovery of all costs in all circumstances is inconsistent with Parliament's grant of discretion to the Board and may not result in tolls that are just and reasonable. In this regard, we disagree with TransCanada's submission to the effect that the Board must approve tolls that allow recovery of all prudently incurred costs, even if the Board knew that those tolls could not be charged in the market. This would be an inefficient and non-sensical outcome.

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[19] RH-2-76 at pp. 3-8 to 3-9 and 3-42 to 3-48.

[20] *Trans Mountain* at p. 3; *B.C. Hydro* at para. 17; *Bell Canada v. Bell Aliant Regional Communications*, [2009] 2 S.C.R. 764, 2009 SCC 40 at para. 40.

[21] *House of Commons Debates*, 24th Parl, 2nd Sess, No 4 (22 May 1959) at 3927-3928 (Hon Gordon Churchill).

In our view, a regulatory rule that compels the Board to set tolls that allow the return of and on investment, irrespective of whether assets associated with that investment are used and useful for providing service, erodes management's responsibility for its investment decisions and management's responsibility to keep depreciation rates current. This situation, in our view, does not lend itself to creating efficient energy infrastructure and markets. It also provides no incentive for a pipeline company to find better or higher uses for its assets.

Given the foregoing, the prudency standard should not be the only standard that determines the opportunity for cost recovery for NEB-regulated pipelines in all circumstances.

Confiscation

TransCanada submitted that *Stores Block* holds that a cost disallowance would amount to confiscation of its property. We are of the opinion that the situation in *Stores Block* is markedly different from the situation that would arise if the Board disallowed costs associated with assets that were not used and useful in providing gas transportation service.

Stores Block involved a reallocation of the sale of proceeds of an asset that the Alberta Energy Utilities Board (Alberta Board) had already declared no longer used and useful in providing gas distribution service. The local gas distribution utility was able to sell the surplus asset at an amount greater than the asset's net book value. When approving the sale, the Alberta regulator allocated part of the gain from the proceeds of the sale to customers of the local gas distribution utility. In effect, the Alberta regulator took money gained from the sale of the utility's asset and redistributed it to the utility's customers. A majority of the Supreme Court of Canada found that this was confiscatory and outside of the scope of the Alberta Board's authority under subsection 15(3) of the *Alberta Energy and Utilities Board Act*.[22]

Stores Block did not deal with the Alberta Board's ratemaking authority. There was no discussion in the case about whether a cost disallowance was confiscatory. At issue in the case was the scope of the Alberta Board's authority to attach conditions when approving the sale of an asset made outside of the normal course of business pursuant to subsection 15(3) of the *Alberta Energy and Utilities Board Act*. In contrast, if the Board disallowed costs, then it would be exercising its core toll-making authority and not attaching conditions to an authorization approving a disposition of assets.

Stores Block also dealt with a local gas distribution utility that had a franchise area. As we have already noted, the Mainline does not have a franchise area in which it is compelled to serve customers. Nor is TransCanada obligated to construct Mainline facilities when the Board issues a certificate of public convenience and necessity; instead, TransCanada makes a choice to invest in those facilities pursuant to that authorization.

[22] R.S.A. 2000, c. A-17.

Unlike the Alberta Board in *Stores Block*, the Board would not take any of TransCanada's property and redistribute it to TransCanada's customers if the Board disallowed costs associated with assets not providing service. TransCanada would remain the owner of its assets; however, TransCanada would not be compensated through tolls for owning those assets because they would not be used for providing customers with service.

Given the foregoing, we are of the view that it would not be confiscatory to disallow costs in appropriate circumstances.

In our view, this conclusion is consistent with the principles set out in *Stores Block*. That case places the ultimate risk of asset ownership on the pipeline company and not its customers. We recognize that *Stores Block* does not specify how a regulator must calculate rate base or determine tolls. However, the Court made clear that the benefits and risks of asset ownership, realized upon the disposition of an asset, rests with the utility. As APPrO noted, if the Board or other regulators were compelled by law to allow recovery of costs associated with assets that are no longer used and useful in providing service, then it is highly unlikely that a utility would dispose of an asset at less than its book value and realize a loss – a potential event described by the Supreme Court of Canada in *Stores Block*. Instead, utilities would leave the asset in rate base and continue to earn a return on and of their investment in the asset.

The GPUAR

TransCanada submitted that the retirement provisions of the GPUAR would lead to the conclusion that the Board does not have the power to order a cost disallowance. TransCanada contended that under the GPUAR when assets are no longer used and useful they are retired and the pipeline gets its money back. It submitted that the existence of the retirement provisions in the GPUAR is a clear indication that the intent of Parliament was not to empower the Board to disallow costs.

Although the GPUAR contain provisions addressing the retirement of assets, none expressly require costs associated with a retirement to be recovered in tolls. Indeed, TransCanada admitted that there was no provision of the GPUAR that required amounts included on its books of account to be automatically recoverable in tolls.

Past Board decisions recognized that the existence of an account under the GPUAR does not mean that costs in the account are automatically recoverable in tolls.[23] We agree with Union's submission that accounting regulations facilitate the Board in setting just and reasonable tolls when using a cost of service methodology. However, it does not follow that the accounting regulations compel the Board to provide for recovery of certain costs through tolls if to do so would result in tolls that are not just and reasonable.

[23] RH-2-97 Part I at p. 14.

As a result, our opinion is that the GPUAR do not constrain the Board's authority under the NEB Act to set just and reasonable tolls.

Fundamental risk faced by TransCanada

The Board previously characterized the situation where the Mainline's fundamental risk materializes as the point at which Mainline throughput has declined to a level where the resulting tolls exceed what the market could bear. If this were to happen, the Board noted that it would no longer be able to protect the Mainline and the Mainline may not be able to recover all of its costs.[24]

TransCanada described the point at which fundamental risk materializes as the point when the last customers remaining on its system would begin to convert to alternative sources of energy, such as coal or wood. TransCanada's argument was that, even at that point, the law compelled the Board to set tolls that would offer TransCanada a reasonable opportunity to recover the Mainline's costs, even if TransCanada would not be able to charge those tolls.

We are of the view that TransCanada has not accurately described how fundamental risk would materialize on the Mainline.

We do not believe that the Mainline's fundamental risk is determined by the ability of the Mainline's most captive shippers to pay increasing tolls. By being connected to various markets and supply basins, the Mainline faces fundamental risks from a variety of sources. For example, the WCSB generates a degree of supply risk, and Canadian markets for natural gas delivered by the Mainline, and export markets, generate a degree of market risk. Because other pipelines may serve these supply basins and markets, the Mainline also faces competitive risk.

This creates a situation where the Mainline serves different markets that are subject to different amounts of competitive risk. As this risk materializes in certain markets but not others (for example, shippers use other pipeline systems or other types of services), throughput will decline on some parts of the Mainline but not necessarily on others. If the remaining subset of Mainline markets, even if relatively small when compared to the Mainline's capacity, could or would absorb costs associated with competition before converting to alternative sources of energy such as wood, it does not mean that the Mainline's fundamental risk has not materialized. Having these markets systematically bear all costs related to a high level of underutilization across the system would amount to an insurance policy protecting the Mainline against the negative effects of competition.

In previous proceedings where the fundamental risks of the Mainline were considered,[25] the Board performed an extensive assessment of the Mainline's market, supply and competitive risks. If the only determinant of the Mainline's fundamental risk would have been the ability of the Mainline's most captive markets to pay increasing tolls, such

[24] RH-4-2001 at p. 26; RH-2-2004 Phase II at p. 43.

[25] RH-4-2001 at pp. 13-28; RH-2-2004 Phase II at pp. 26-47.

assessments of market, supply and competitive risks would have been of limited relevance and would have been done differently. They may have been done with a much greater emphasis on the ability of the Mainline's most captive markets to pay higher tolls.

In our view, there is a limit to the level of costs related to underutilization resulting from competition that Mainline shippers can absorb for tolls to remain just and reasonable. It is not just and reasonable for all of the costs of, and the risk associated with, competition to be borne by shippers on the system who do not have access to competing sources of supply for their energy needs. Tolls cannot continue to increase each year in response to throughput decline. This approach leads to a gradual erosion of the Mainline's competitiveness and exacerbates throughput decline.

We recognize that some past Board decisions indicated that TransCanada did not bear the risk of throughput variation under the Mainline's existing tolling methodology. Under this approach, variability risk associated with year-to-year changes in throughput was placed on the Mainline's shippers, who paid increasing tolls as throughput on the Mainline declined. In our view, when underutilization reaches a very high level, the materialization of throughput risk converges towards the materialization of the fundamental market, supply and competitive risks.

We recognize that determining the point at which underutilization is the materialization of the Mainline's fundamental risk requires the Board to use informed judgment. The Board's judgment can be informed by, among other things, the following factors:

- the current and expected throughput on the Mainline. This includes the extent to which certain segments or portions of the system are and will be utilized;

- the extent to which Mainline shippers bear costs not associated with providing them service. This includes whether underutilized facilities provide operational benefits to Mainline customers such as reliability or lower fuel consumption; and

- the current and expected competitiveness of Mainline tolls, as discussed in greater detail in Chapter 12. We acknowledge that for the most captive markets, an assessment of the competitiveness of tolls would not be meaningful because they do not have reasonable competitive alternatives.

The first two factors capture aspects of the used and useful standard discussed earlier in this chapter.

In our view, TransCanada downplays the extent to which the Mainline bears fundamental risk, and how close that risk is to materializing, by emphasizing past Board comments regarding the risk of underutilization and how such underutilization should be treated. This emphasis ignores that the Mainline bears fundamental risk that ultimately materializes at low or non-existent levels of utilization, and that the Mainline's awarded cost of capital has always been above the risk-free rate of return. It also fails to acknowledge that the Mainline is in an unprecedented position. No major NEB regulated

natural gas transmission pipeline has been affected by market forces to the extent that the Mainline is now affected.

It is not unfair for TransCanada to bear financial consequences of fundamental risk

We are of the view that it is not unfair for TransCanada to bear negative financial consequences if the Mainline's fundamental risk materializes even if we, and previous Board decisions, define fundamental risk differently than TransCanada. Investors were aware, or ought to have been aware, that they may at some time receive lower than expected returns. Investors have financed an asset that faces risk, albeit in a regulated environment. The materialization of fundamental risk could be visited on investors through lower than expected returns, for example through a disallowance, unless TransCanada is able to develop and propose acceptable mechanisms for cost recovery. We also note that TransCanada could avoid lower returns by redeploying or repurposing assets.

We are of the view that an asymmetric risk premium is not required to compensate investors for the realization of fundamental risk because the possibility of fundamental risk materializing was known to market participants, albeit unlikely by their assessment. Our view is that the likelihood of this event happening, including the extent to which it has an asymmetric nature, has been consistently reflected in the Mainline's cost of capital and allowed return. The historical risk premiums allowed were commensurate with the risks the Mainline was facing. As the business risk facing the Mainline increases, so does the risk premium.

In our view, imposing costs of the materialization of fundamental risk on TransCanada would not amount to an inappropriate regulatory model where the Mainline can only charge tolls that are the lower of cost or market. It is possible for the Mainline to charge cost-based tolls (subject to deferrals) up to the point when fundamental risk materializes. The risks involved in this approach have been and are reflected in the Mainline's cost of capital and allowed return. While toll competitiveness is an important consideration in determining whether the Mainline's fundamental risk has materialized, we will explain in Chapter 12 that to be considered competitive, tolls do not necessarily need to be in the money based on annual averages of basis differentials, netbacks, or delivered cost of gas on competing pipeline alternatives.

Further, we note that the concept of "expected return" indicates that the return is not a guaranteed return. It is a return to be earned if, among other things, depreciation rates correspond to the economic useful life of the regulated asset. TransCanada has been compensated for the risk that its best estimate of depreciation rates may end up being different than forecast – which is what a cost disallowance, upon a materialization of fundamental risk, could constitute. As a result, and as explained in the RH-2-2004 Phase II Decision, it is incumbent on TransCanada's management to seek changes to depreciation rates if it becomes apparent that depreciation rates do not adequately reflect current estimates of economic life.

Should investment be disallowed in the current circumstances?

Current underutilization of the Mainline, and the lack of competitiveness of the tolls that result from either the Status Quo or approved aspects of the Restructuring Proposal, raises the questions of whether the Mainline's fundamental risk has materialized, and whether some costs should be disallowed. With an integrated system like the Mainline, we expect that certain Mainline facilities may be underutilized or unutilized at various points in time; however, that does not mean that costs should be disallowed in each such instance. Instead, we believe that a contextual approach should be adopted. The approach would take into account, among other things, the following:

- the Mainline's current and forecast throughput: as explained in Chapter 3, we are of the view that the Case 1 throughput forecast is the most probable. This scenario contemplates an improvement in Mainline throughput starting in 2013 and beyond;

- whether the facilities provide benefits in terms of operational flexibility, reliability or lower fuel consumption: evidence on the record of this proceeding indicates that having more facilities in service can reduce the Mainline's fuel consumption and provide operational flexibility and security of supply; and

- whether tolls can be set at a competitive level while providing a reasonable opportunity to recover costs considering the competitive business environment in which the Mainline operates: as explained in Section 12.1, we are of the view that the tolls resulting from the approved components of the Restructuring Proposal would be uncompetitive.

In our view, this contextual approach is consistent with providing the Mainline a reasonable opportunity to recover its costs. It also evidences a supportive regulatory environment.

In the current circumstances, there is an alternative to a cost disallowance. As explained in Chapter 12, we have found that tolls can be set over a multi-year period at a level that provides the Mainline with a reasonable opportunity to recover its costs over a reasonable period of time, and at a level that would be expected to allow the Mainline to be competitive.

Based on the foregoing, we find that the Mainline's fundamental risk has not materialized. Therefore, we are not disallowing costs. In reaching this finding, we gave the most weight to the forecast increase in Mainline throughput. Given that forecast, we are of the view that TransCanada should be afforded the time and tools to adapt to its business environment, and the time to take advantage of the opportunities offered by this Decision, before Mainline costs are considered for possible disallowance.

If throughput is lower than expected, or if TransCanada does not take advantage of the opportunities offered by this Decision, we would anticipate that TransCanada's next toll

hearing would deal with what costs, if any, should be disallowed from recovery in tolls. In considering such questions, the Board will consider, among other things, the prudency and sufficiency of TransCanada's management of its facilities in facing competition.

Decision

No costs are disallowed in this proceeding.

4.3 Securitization Proposals

Notwithstanding the views expressed above that costs should not be disallowed in the current proceeding, what follows is a description of potential securitization mechanisms proposed by certain parties with the corresponding views of TransCanada and others.

Views of TransCanada

TransCanada submitted that securitization is a tool that has been applied in the past to recover uneconomic or stranded costs in the utility sector. TransCanada indicated that with securitization, the cost of capital can be lowered through the use of government-sponsored debt for 100 per cent of the financing requirements of a utility project. The debt is allowed high credit ratings because of credit enhancements that are initiated by government action.

TransCanada submitted that securitization would require a financing act from the government. Subsequently, the regulator would need to pass a financing order, authorizing the establishment of a Special Purpose Entity to issue securitization bonds. The financing order would also approve the mechanism to enable collection of the surcharge from ratepayers, and distribute the surcharge to the Special Purpose Entity to service the securitization bonds. TransCanada indicated that a true-up mechanism would also need to be established, so that shortfalls in bond payments are sufficiently covered, and securitization bondholders are protected from prepayment risk.

TransCanada indicated that it understood the securitization process, and if it deemed securitization to be a favourable or necessary tool to address challenges faced, it would evaluate and bring such a proposal to the Board as it saw fit.

Views of Intervenors

APPrO

In light of TransCanada's updated throughput forecast, APPrO recommended that $3 billion should be removed from rate base and securitized, rather than the $2.2 billion originally proposed. APPrO described the securitization mechanism as a financed buy down of rate base, eliminating from the annual revenue requirement the depreciation expense and return associated with the underutilized assets. APPrO submitted that the securitization would serve to lower the Mainline's tolls, reduce its business risk and required return on capital, and increase its long-term viability thereby increasing its depreciable life.

APPrO submitted that a Special Purpose Entity would issue the securitization bonds, where the proceeds from the bond sale would be used to finance a rate base buy down. An itemized surcharge would be charged to firm shippers to service the securitization. Although initially put forth as a balloon payment mechanism, APPrO later proposed that the securitization bonds should have an amortizing structure, for more effective tax treatment. APPrO recommended that a true-up mechanism should be established, so that the surcharge could be adjusted if the surcharge collections varied from forecasted amounts.

APPrO indicated that the Mainline's debt was only callable at a significant financial penalty, so in order to maintain the pre-securitization deemed capital structure of 40 per cent equity, TransCanada Corporation, as the Mainline parent, would need to effectively guarantee that the Mainline would have access to an amount of equity required to maintain this deemed equity ratio. Further, APPrO submitted that a defeasance mechanism should be used to retire the Mainline's bonds, until the deemed and actual capital structures are aligned.

APPrO suggested that although a government guarantee or form of backstop for the securitization bonds would affect the value of securitization, a non-guaranteed buy down of excess capacity on the Mainline would still provide substantial benefits, and the structure of the bond offering would be essentially the same with or without a government guarantee.

APPrO submitted that the Board should set tolls for FT shippers at the levels proposed in its ATM, reflecting a right-sized cost base using the underutilization calculations presented, excluding the $3 billion in underutilized assets. APPrO indicated that this would incent TransCanada to devise a solution that would achieve both near and longer-term viability for the Mainline, and that securitization, repurposing of assets, or redeployment of unutilized assets are all tools available to the Mainline to achieve this toll level. APPrO argued that securitization would protect shareholders by allowing them to recover their capital and costs associated with the securitization mechanism. APPrO added that if the actual securitization TransCanada would achieve were different from the securitization proposals put forth in this proceeding, any resulting variances should be taken into account by the Board in setting Mainline tolls prospectively.

CAPP

CAPP indicated it was premature to contemplate a securitization of Mainline assets although it is not averse to such a concept at the appropriate time.

IGUA

IGUA originally submitted that $1.6 billion, related to underutilized assets in the NOL and Prairies segments of the Mainline, should be removed from rate base. IGUA argued, however, that the precise amount removed from rate base should be adjusted to reflect the level of underutilization at the time IGUA's proposal is implemented. IGUA proposed that TransCanada shareholders should contribute half of this amount, and the other half should be securitized and paid for with a volumetric toll rider charged to shippers in tolls for 2014 onward. IGUA indicated that its securitization proposal would essentially shrink the size of the regulated company, by removing excess Prairies and NOL capacity from rate base. IGUA argued that it is not requesting that the underutilized portion of the Mainline's assets be removed from service, and that it would be up to TransCanada's management to decide whether to redeploy, or not, the 50 per cent portion absorbed by TransCanada. IGUA indicated that the securitization proposal could be designed so that it would be reversible if significant volumes returned to the Mainline.

IGUA submitted that while its proposal was not a step-by-step blueprint of a securitization transaction, the Board should facilitate commencement of a securitization. IGUA noted that securitization is complex, and that it could not likely be implemented in 2013. Further, IGUA indicated that it did not believe TransCanada would voluntarily bring forward a securitization proposal itself.

IGUA proposed that the Board issue a decision determining the amount of plant no longer used and useful based on the latest available Mainline underutilization data,[26] quantifying the capital reduction and shipper/pipeline sharing percentages, and establishing goals for a securitization program. The decision would also establish a task force comprised of key stakeholders including a neutral Board representative, determine the task force's mandate, and establish timelines allowing for approval and implementation of the securitization by 1 January 2014. Additionally, IGUA submitted that TransCanada would have to keep detailed records and minutes of the work of the task force, and file interim progress reports with the Board at least every two months.

IGUA also requested that the Board provide a recommendation to the Government of Canada to provide TransCanada whatever guarantees and other assistance deemed necessary for the implementation of the securitization transaction.

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[26] The updated underutilization calculations performed by Mr. Otis of IGUA indicated that both the NOL and Prairies segments were 62 per cent underutilized, as compared to the 57 and 49 per cent, respectively, he originally calculated. The original calculations corresponded to the $1.6 billion figure discussed. IGUA explained that these numbers may change before the proposal is implemented.

TransCanada's Reply

TransCanada submitted that the securitization proposal, as submitted by APPrO, was unworkable, not practical, and did not follow industry practice or standards.

Specifically, TransCanada indicated that government backing would be necessary in order for securitization to be successful. TransCanada's expert witness, Mr. Engen, also noted what he regarded as flaws with some features of APPrO's proposal, including APPrO's indication that an AAA credit rating is unnecessary, and its claim that no further credit enhancements would be required. Additional problems noted by TransCanada with APPrO's securitization mechanism included the defeasance mechanism, the term of the securitization bonds and the Special Purpose Entity's equity interest in Mainline assets. Additionally, TransCanada indicated that under APPrO's proposal, because of the lack of a toll-rider super priority, or difference in the risk profile between the normal transportation toll and the toll-rider, there would be no rational reason for an investor to purchase the securitization bonds.

Mr. Engen submitted that although a government guarantee could address many of the flaws with APPrO's proposal, he had serious concerns about the likelihood of obtaining a government guarantee.

Mr. Engen noted that with IGUA's proposal, as it was the case with APPrO's proposal, the Special Purpose Entity interest in the Mainline would be problematic. TransCanada argued that the Board establishing an industry task force to develop a securitization plan for the Mainline would not be beneficial, or efficient, if TransCanada were to consider securitization in the future.

Views of the Board

We are of the view that the securitization proposals put forth by APPrO and IGUA are not workable and not practical solutions to address the challenges the Mainline is currently facing. In our opinion, the securitization proposals were not sufficiently developed and had practical flaws.

It is highly unlikely that securitization would provide material cost savings without a government backstop. We believe that any potential savings realized from a securitization transaction without a government backstop would largely be offset by its costs due to the penalty involved in calling the Mainline's outstanding debt, and because the mechanisms required to achieve the desired credit enhancement for a securitization come at significant cost. In this regard, we note that no entity volunteered to guarantee securitization bonds, or provide any other form of credit enhancement.

In our view, securitization requires action from government. As noted by TransCanada, legislative action is required to create a property right for the securitization bondholders. Absent such legislation, it is our view that a securitization program would not be accompanied with appropriate assurances to the securitization bondholders.

The Board does not have the legal authority to compel a government to backstop a securitization. No evidence was submitted that a government would be willing to provide a backstop to enable a securitization of Mainline assets. Nor would it be appropriate for us to make a request to any level of government to support a securitization of the Mainline.

We are not prepared, as APPrO suggested, to set tolls on the assumption that TransCanada would be able to effect a securitization of Mainline assets. Based on the record before us, we find the probability of securitizing Mainline assets remote and adopting APPrO's approach would amount, in all likelihood, to a disallowance of costs from the Mainline rate base, an action we are not undertaking in this Decision based on our views expressed earlier in this chapter.

We will not direct the implementation of a securitization task force, or become involved in the development of any securitization program, as requested by IGUA. In our view, maintaining the economic viability of the Mainline is the responsibility of TransCanada. We note that it is in the Mainline's best interest to evaluate and bring a securitization proposal forward as and when it sees fit. In our view, the Board's role comes later in the adjudication of any potential securitization proposal. It is of paramount importance that the Board remains impartial during such an adjudication process.

The Board will remain open in considering any type of proposal that will address the potential issues facing the Mainline in the future, including a well-developed securitization proposal, and will evaluate any proposal based on its merits.

Decision

We do not approve any of the securitization proposals.

Chapter 5

Mainline Depreciation Proposal

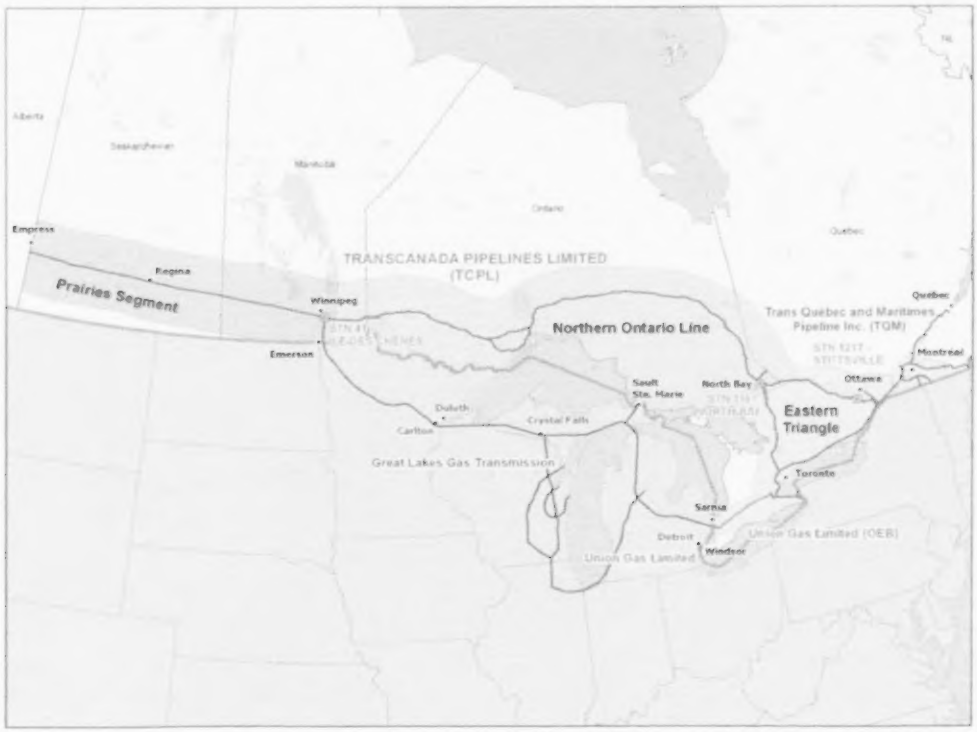
TransCanada's Mainline depreciation proposal sought approval of: 1) continued use of segmentation for depreciation purposes; 2) separate, updated EPH of 2036 for the Prairies segment, 2025 for the NOL and 2050 for the Eastern Triangle; and 3) a reallocation of approximately $1.2 billion in accumulated depreciation from the Prairies and Eastern Triangle segments (combined) to the NOL. The depreciation proposal was supported by a depreciation study conducted by Larry Kennedy of Gannett Fleming Inc. (Gannett Fleming), and evidence of Barry Sullivan and James Guest of Brown, William, Moore and Quinn.

5.1 Continued Use of Segmentation for Depreciation Purposes

Views of TransCanada

TransCanada proposed to continue the segmented approach to Mainline depreciation that was introduced with the 2007-2011 Mainline Tolls Settlement (Settlement). As noted previously, the three geographical segments are the Prairies, the NOL and the Eastern Triangle. These segments are depicted in Figure 5-1.

Figure 5-1 Mainline Asset Segments for Depreciation



TransCanada stated that segmentation is beneficial as it has the ability to reflect the different economic forces affecting each Mainline segment in the EPH of each segment. In TransCanada's view, use of segmentation results in a better match between the consumption of service value and depreciation expense on a go-forward basis (by segment) compared to the use of a system-wide approach.

Views of Intervenors

Intervenors did not raise any concerns with using segmentation for depreciation.

Views of the Board

We accept that the Prairies, NOL and Eastern Triangle segments are affected by different economic forces. Therefore, we find that segmentation of the Mainline for depreciation purposes is appropriate as it better reflects the economic circumstances of these segments.

Decision

We approve the continued use of segmentation for depreciation purposes.

5.2 Separate Economic Planning Horizons for Each Segment

Views of TransCanada

TransCanada submitted that the proposed EPH for each segment was determined by evaluating the unique factors that influence each segment.

Prairies Segment

TransCanada recommended the year 2036 for the EPH of the Prairies segment. TransCanada stated that this segment accesses many markets but depends upon a single source of supply - the WCSB, making the availability of WCSB supply a key consideration for the EPH of this segment. TransCanada noted that in 2010, NGTL filed a settlement for the Alberta System that was based, in part, on Gannett Fleming's depreciation analysis, which supported 2036 as its EPH. The availability of WCSB supply was also a key consideration in setting the EPH of the Alberta System. After considering the supply outlook for the WCSB, the expected decline in conventional supply and growth in less certain unconventional supplies, TransCanada concluded that the same EPH was appropriate for the Prairies segment of the Mainline.

Northern Ontario Line

TransCanada recommended the year 2025 for the EPH of the NOL segment. TransCanada stated that this segment faces competitive alternatives that attract WCSB gas supply and competitive alternatives that serve the same markets as the NOL. With respect to the usage of this segment,

TransCanada submitted that flows across the NOL segment have declined by roughly 70 per cent over the past ten years. The NOL segment serves a supply with a substantive amount of available capacity. It also serves markets with different supply and pipeline alternatives and will face increasing competition from new sources of U.S. supply. The market demand along the NOL is also limited. TransCanada forecasts an average flow of approximately 200 million cubic feet per day on this segment, adding that flows would recover slightly in the near term in response to the Restructuring Proposal and then commence a steady, gradual decline into the future.

Given these factors, TransCanada determined that a relatively short EPH for the NOL, in the range of 2020 to 2030, would be appropriate. TransCanada recommended the middle of this range, 2025, as the EPH for the NOL segment if the Restructuring Proposal is implemented. TransCanada stated that although flows may continue at some reduced level beyond 2025 mainly to serve captive markets within the NOL segment, it is reasonable to expect that most of the capital recovery on the NOL will have occurred by 2025. Thus, 2025 represents a reasonable economic life estimate for the NOL under the Restructuring Proposal.

TransCanada submitted that the EPH for the NOL should also be updated in the event that the Status Quo is maintained. Under the Status Quo, the EPH would be shortened, as the lower tolls envisioned under the Restructuring Proposal would not go into effect and this could result in a loss of throughput on the NOL. Therefore, TransCanada determined that a shorter EPH in the range of 2020 to 2030 would be appropriate. TransCanada recommended the lower end of the range, 2020, as the EPH for the NOL under the Status Quo.

Eastern Triangle

TransCanada recommended the year 2050 for the EPH of the Eastern Triangle segment. TransCanada stated that this segment is a key connector in the North American pipeline and storage infrastructure grid. The demand for natural gas in connecting markets is expected to grow and gas is expected to remain competitive with other fuels in this region. TransCanada expects the Eastern Triangle segment to continue to play a role in serving these markets. On the supply side, the Eastern Triangle segment is also connected to multiple supply sources via Dawn and to the WCSB via the NOL.

TransCanada noted that in 2010, TQM received approval for a tolls settlement for 2010 to 2012. This settlement was supported by a depreciation study prepared by Gannett Fleming that used 2050 as the EPH for its Québec segment of the TQM System. TransCanada considered whether the EPH recently established for the Québec segment of the TQM System would be appropriate for the Eastern Triangle segment of the Mainline. Given the similarity in the purposes and supply/demand dynamics of these two segments, and recent throughput and market forecasts, TransCanada concluded that 2050 also serves as a reasonable EPH for the Eastern Triangle.

Views of Intervenors

Intervenors did not raise any issue with the EPH recommended by TransCanada for the Prairies segment or the Eastern Triangle. However, CAPP suggested that the truncation date for the NOL should be 2020. MAS also suggested that a shortened EPH of 2020 be used for the NOL segment. MAS stated that the NOL segment is currently underutilized, and is not expected to

become sufficiently utilized between 2012 and 2020. Setting the EPH of the NOL at 2020 would immediately raise depreciation expense and consequently the revenue requirement and tolls over the next nine years (2012-2020) but considerably reduce tolls beyond 2020, when the NOL would have been fully depreciated.

WEG submitted that, under an adjusted Status Quo scenario, if TransCanada were to simply extend the EPH for the NOL out to 2025, it could still realize most of the lower depreciation expense benefits without creating tolls that could cause intergenerational inequities. Extending the EPH for the NOL out to 2025 would also eliminate concerns that parties raised about the potential impact of transferring Mainline assets to oil service in the future and any inequities that might arise under such a scenario.

Centra submitted that extending the EPH of the Prairies segment of the Mainline, which is acknowledged to be underutilized at this time, increases the likelihood of intergenerational inequities being visited upon the remaining shippers if throughput on the Mainline remains at current levels or continues to decline.

Views of the Board

We accept that 2036 and 2050 are appropriate EPH for the Prairies and Eastern Triangle segments, respectively. We note that Centra raised concern about the use of these EPH. While Centra indicated that extending the Prairies' EPH increases the likelihood of intergenerational inequities if throughput does not recover, this does not mean that the proposed Prairies' EPH is not appropriate.

There is also no disagreement with TransCanada's proposition that the EPH of the NOL should lie somewhere between 2020 and 2030. We note TransCanada's intent to shorten the EPH of the NOL if the Restructuring Proposal is not implemented. In light of the approximately 70 per cent decline in NOL volume over the past decade and TransCanada's forecast of flat to declining NOL throughput, we are of the view that it would be appropriate for TransCanada to depreciate the NOL over a shortened time frame. Accordingly, we approve the EPH of the NOL to be 2020.

Decision

We approve the EPH of 2036 for the Prairies, 2020 for the NOL and 2050 for the Eastern Triangle.

5.3 Reallocation of Accumulated Depreciation

Views of TransCanada

TransCanada stated that an allocation of accumulated depreciation reserve was originally done in 2007 as part of the implementation of segmented depreciation under the Settlement.

In its Application, TransCanada used the concept of consumed service value (CSV) to represent the usage of its pipeline segments. The CSV for a particular segment was measured as the throughput on that segment since it first went into service until the end of 2011, divided by the sum of the historical throughput and the forecast of the throughput from the start of 2012 to the end of the EPH of that segment. TransCanada also used the term consumed depreciation (CD) which was calculated as the accumulated depreciation on a segment divided by the segment's Gross Plant in Service.

TransCanada submitted that use of a system-wide depreciation approach prior to 2007 increased the divergence between the accumulated depreciation of each segment and its CSV. TransCanada determined that based on the CSV calculation, the NOL segment should be approximately 84 per cent depreciated by the end of 2011. Applying this percentage to the Gross Plant in Service of the NOL ($5.3 billion as of 31 December 2011) means that the NOL should have an accumulated depreciation balance of approximately $4.4 billion by the end of 2011 ($5.3 billion multiplied by 83.6 per cent). However, at existing depreciation rates, the accumulated depreciation of the NOL segment was estimated to have reached only $3.2 billion at the end of 2011. In order to close this gap of approximately $1.2 billion ($4.4 billion minus $3.2 billion) in the NOL's accumulated depreciation, TransCanada proposed to reallocate approximately $1.2 billion of accumulated depreciation from the Prairies and Eastern Triangle segments, combined, to the NOL segment.

The amount of reallocation from each of the Prairies and Eastern Triangle segments was based on the proportion of accumulated depreciation of these two segments relative to each other. TransCanada determined the split to be 60 per cent/40 per cent between the Prairies and the Eastern Triangle segments, respectively. Accordingly, the amounts reallocated from the Prairies and Eastern Triangle segments would be approximately $720 million (about 60 per cent of $1.2 billion) and $480 million (about 40 per cent of $1.2 billion), respectively. In TransCanada's view, this reallocation would address the gap between the remaining service value and the remaining capital to be recovered of the NOL segment, without affecting the total Mainline Gross Plant in Service, accumulated depreciation or net plant in service.

TransCanada stated that the proposed approach to depreciation is designed to improve the long term economic viability of the Mainline and the WCSB, while remaining consistent with general depreciation and regulatory principles. The proposal lowers the depreciation expense below what it would be if existing depreciation rates were maintained or if the Restructuring Proposal were not implemented, thus benefitting all Mainline shippers. Further, TransCanada submitted that the changed allocation will distribute CSV across the segments in a way that better reflects the accumulated depreciation.

TransCanada submitted that the depreciation expense under the Status Quo is estimated to be approximately $114 million per year higher than under the Restructuring Proposal. The toll impact reflects an even larger revenue requirement reduction of approximately $154 million due to associated return and income tax impacts. TransCanada stated that the composite depreciation is reduced from approximately 3.1 per cent under the existing 2011 depreciation rates to approximately 2.3 per cent under the depreciation proposal. This reduction will result in a decrease in the Mainline depreciation expense from approximately $393 million in 2011 to approximately $278 million in 2012.

TransCanada stated that prior to preparing the Restructuring Proposal, as part of the Settlement discussions with stakeholders, it considered other reallocation options. For example, TransCanada considered reallocation amounts that were both larger and smaller than the Restructuring Proposal's $1.2 billion. The smaller amounts would have resulted in a CD to CSV ratio for the NOL segment closer to 90 per cent instead of the 100 per cent included in the Restructuring Proposal. TransCanada also considered basing the reallocation split on remaining economic lives.

In response to information requests, TransCanada explored some other reallocation scenarios. One scenario presented by TransCanada was the EPH-weighted alternative, which involved a $855 million reallocation to the NOL and resulted in a CD to CSV alignment of 74 per cent, 92 per cent and 51 per cent for the Prairies, NOL and Eastern Triangle segments, respectively. TransCanada stated that although this option would consider the misalignment on the NOL and the differences in the EPH of each segment, the annual depreciation expense under this scenario would be $287 million, slightly higher (that is, by $8.4 million) than under the Restructuring Proposal. Another scenario would have resulted in an equal 79 per cent CD to CSV alignment for each of the three segments. TransCanada noted that that scenario would lead to an annual depreciation expense of $309 million, which is approximately $30 million higher than the annual depreciation expense under the Restructuring Proposal. Further, such a scenario would not account for differences in EPHs associated with each segment. TransCanada submitted that it chose to advance in the Restructuring Proposal the depreciation approach that best aligned the collection of remaining service value over the remaining life of the system as a whole by addressing the NOL segment as the NOL has the largest CD to CSV misalignment, the largest CSV to recover and the shortest remaining life of the three segments.

In support of its proposal to reallocate accumulated depreciation, TransCanada provided examples from its expert Mr. Sullivan's experience with two U.S. utilities, *Kern River Gas Transmission Company* (Kern River),[27] and *Williams Natural Gas Company* (Williams),[28] where accumulated depreciation had been reallocated and approved by the U.S. Federal Energy Regulatory Commission (FERC). TransCanada further stated that between 2007 and 2011, Mr. Kennedy of Gannett Fleming was involved in 30 proceedings, where reallocation of accumulated depreciation was approved without controversy. TransCanada also referred to three Canadian cases where the effect of the regulatory decision was to accept an apportionment of booked accumulated depreciation as included in the depreciation studies that were filed.

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[27] 117 FERC ¶ 61,077.

[28] 60 FERC ¶ 61,140.

Views of Intervenors

APPrO

APPrO presented an ATM proposal, which included a mechanism for right-sizing the Mainline. The proposal adopted the reallocation of accumulated depreciation between the Mainline segments as contemplated in TransCanada's Application. In APPrO's submission, this had the effect of mathematically increasing the base case remaining life on the Mainline from 14 years to 19 years (2.3 per cent on total assets as opposed to 3.1 per cent) without any actual physical change. Under the ATM, the Mainline's average remaining useful life was further increased from 19 years, which APPrO said was advocated by TransCanada, to 23 years. This represented a depreciation rate on total facilities of approximately 1.9 per cent and would decrease the annual net revenue requirement by about $57 million.

APPrO submitted that this extension of the Mainline's useful life is appropriate given that once the Mainline is right-sized, tolls and risk would be significantly reduced and the economic viability of the Mainline would be enhanced. Therefore, an extended useful life for the right-sized asset base was reasonable. APPrO submitted that its acceptance of TransCanada's depreciation proposal came with a caveat that APPrO's ATM, or some other similar proposal, is implemented that would right-size the Mainline. APPrO further submitted that should the Board approve the transfer of accumulated depreciation, the Board should condition the approval on preservation of records that would allow the "unscrambling" of each segment's net book value, (that is, enable the net book value of the Mainline assets to be examined as though the shift of accumulated depreciation had never occurred). APPrO stated that otherwise, if segmentation becomes the next step, the wealth transfer would be irreversible and APPrO would find that objectionable.

CAPP

CAPP objected to the proposed transfer of accumulated depreciation. CAPP's evidence pointed out that although the reallocation corrects the discrepancy between CD and CSV on the NOL segment, it magnifies the discrepancy on the Prairies and Eastern Triangle segments. Under the Status Quo, the ratio of CD to CSV at the end of 2011 is 0.91, 0.73 and 0.76 for the Prairies, NOL and Eastern Triangle segments, respectively. TransCanada's Restructuring Proposal manages to bring this ratio for the NOL segment to almost exactly 1.0, but the ratios drop to 0.60 and 0.51 for the Prairies and Eastern Triangle segments, respectively.

CAPP viewed the proposal to transfer accumulated depreciation as flawed and one that inappropriately pre-positions TransCanada for a write-down of the NOL should that become necessary in the future. CAPP also expressed concern about the impact the transfer may have if part of the NOL were transferred to oil service in the future. Given that possibility, CAPP submitted that it would be inappropriate, in advance, to artificially move a certain portion of the value associated with those assets to the other segments. CAPP also noted that if the Board approved the transfer, and later determined there were stranded assets, TransCanada admitted that it would be difficult to unscramble the net book values of Mainline assets.

CAPP suggested that in lieu of the proposal to shift accumulated depreciation, TransCanada use its LTAA to manage its costs. In CAPP's view, use of the LTAA is preferable as it is more

transparent and does not involve the flawed reallocation of accumulated depreciation to the NOL. Under CAPP's proposal, as further described in Chapter 12, TransCanada would continue to depreciate its assets at the accrual rates prescribed under the Status Quo. However, a pre-specified amount of the Mainline's annual revenue requirement would be diverted to TransCanada's LTAA. This could produce similar outcomes as the Restructuring Proposal in terms of annual revenue requirement and system-wide net book value. In its evidence, CAPP assumed $100 million annual LTAA additions from 2012 to 2016. This would allow TransCanada to fully depreciate the NOL within its useful lifetime without shifting accumulated depreciation from the other two Mainline segments.

CAPP submitted that using the LTAA in this way is more flexible than the proposed depreciation shift as the amount that flows into the LTAA could be easily adjusted in response to unanticipated changes in the market without being restricted to the parameters and assumptions embedded in a depreciation study. CAPP indicated that its approach gives TransCanada the opportunity to fully recover all of its costs, without taking the radical and permanent action of shifting accumulated depreciation.

WEG

WEG characterized TransCanada's depreciation proposal as a shuffle and a deferral. WEG pointed out that from 2012 and until 2020 (compared to the Status Quo), the rate base under the Restructuring Proposal increases by $115 million each year. WEG submitted that by 2020, the rate base under the Restructuring Proposal would be over one billion dollars higher, compared to the Status Quo. The annual $115 million reduction in Mainline depreciation expense gets offset by a higher overall rate of return based on a higher rate base, compared to the Status Quo. In WEG's view, a higher rate base, with concerns about lower future throughput and lower billing determinants, increases the risk of a toll spiral and escalates issues of intergenerational inequities on the Mainline over the long-term.

Apache, Enerplus and Husky

Apache, Enerplus and Husky opposed the transfer of accumulated depreciation and in its place, supported the use of the LTAA as recommended by CAPP. They stated that use of the LTAA would avoid the problem of reallocating accumulated depreciation between segments while achieving an essentially equivalent result for TransCanada in terms of lower tolls. Apache, Enerplus and Husky submitted that factors like gas supply, markets and pipeline competition that go into determining the appropriate approach to Mainline depreciation are clouded in uncertainty and in today's environment, that uncertainty is worse than ever. In their view, the response to the uncertainty should not be reallocation of depreciation; rather, a better response would be the use of the LTAA as proposed by CAPP.

Centra

Centra did not support the transfer of accumulated depreciation. Centra expressed concern that a transfer of accumulated depreciation would be followed by a transfer or decommissioning of one of the now more fully depreciated lines, which would in effect transfer additional expense to Centra and other shippers remaining on the Mainline.

MAS

MAS opposed TransCanada's proposal to reallocate accumulated depreciation between segments. MAS contended that the proposal to transfer accumulated depreciation does not comply with Canadian and U.S. generally accepted accounting principles (GAAP). MAS submitted that GAAP serves as a foundation for ensuring careful regulatory control over North American rate and toll regulation. MAS stated that the proposed transfer between segments is on account of a "change in estimate" of the useful lives of the segments. Under U.S. GAAP, changes in estimates must be made prospectively, that is, changes reflected in the period of change or in the period of change and future period if it affects both. MAS submitted that TransCanada is proposing to modify the useful lives of the three segments and to reallocate the accumulated depreciation between these segments in order to realign the net book value of the NOL segment with its CSV. In doing this, TransCanada is proposing to change the useful life estimate of one segment on a retrospective basis. MAS further pointed out that the proposed transfer is not a consequence of an associated movement of property, plant and equipment in service between the three Mainline segments, based on which a transfer of accumulated depreciation could have been justified. Further, MAS contended that the general principle in the GPUAR is not to allow a transfer of accumulated depreciation.

MAS indicated that TransCanada's proposal is not in the public interest. In MAS' view, the Canadian public interest is served when Canadian gas consumers have open, transparent and competitive access to gas supply markets and transportation services. If the captive customers in the Eastern Triangle are burdened with the excess costs resulting from the proposed transfer of accumulated depreciation, the objective of achieving competitive access to transportation services and gas supply markets would not be achieved. MAS stated that the reallocation is not an equitable measure as it results in an unfair allocation of risks between the owners of the Mainline and its captive shippers. MAS suggested that by transferring rate base away from the NOL, TransCanada is effectively shifting costs and risks to captive shippers in eastern Canada, which is contrary to accepted methods of pipeline tolling. MAS indicated that although TransCanada's depreciation proposal may enhance the competitiveness of the Mainline in the short term, it would exacerbate existing problems in the long term. Reducing current tolls by passing the costs to future generation of shippers may not itself serve the long-term Canadian public interest.

MAS submitted that neither the *Kern River* nor the *Williams* cases cited by TransCanada are comparable to or supportive of TransCanada's proposal. In addition, MAS contended that there are important FERC precedents that clearly contradict TransCanada's depreciation proposal. MAS referred to three cases: the *South Carolina Electric & Gas Company* (SCE&G);[29] *Equitable Gas Company* (Equitable);[30] and *Northern Natural Gas Company* (Northern Natural).[31] MAS submitted that in these cases, the FERC appropriately identifies the close connection between the book value of rate base and specific utility assets, while confirming that the former cannot just be shifted around in an unprincipled fashion when convenient for the utility.

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[29] 76 F.E.R.C. ¶ 61,338 and 79 F.E.R.C. ¶ 61,083.

[30] 56 F.P.C. 1655.

[31] 72 F.E.R.C. ¶ 61,163.

Gaz Métro

Gaz Métro opposed TransCanada's proposal to transfer accumulated depreciation between segments and provided additional argument in this matter. Gaz Métro noted TransCanada's acknowledgment that the proposed transfer is unprecedented in the determination of Mainline tolls.

Gaz Métro stated that the *Williams* and *Kern River* cases referred to by TransCanada do not support the proposed transfer. Gaz Métro stated that the *Williams* case dealt with the treatment of a change in accounting method (from straight line to unit of production) associated with the initial break-out of non-integrated gathering systems, for purposes of establishing individual rates for each of these systems, following *Williams*' decision to become an open-access carrier. Gaz Métro stated that from an accounting and regulatory perspective, this situation is fundamentally different from the transfer of $1.2 billion between segments of an integrated system, operated as a whole, to supply an integrated service, in the absence of any modification in the accounting method used or in the status of the regulated entity. Referring to the *Kern River* case, Gaz Métro argued that its precedential value was hard to establish since, as TransCanada acknowledged, the FERC's opinion in *Kern River* did not articulate the fact pattern in that case as well as it did in *Williams*. Further, Gaz Métro submitted that the three Canadian cases cited by TransCanada were, by TransCanada's own admission, uncontested cases where the regulator did not have to rule specifically on an application to transfer depreciation. Gaz Métro noted TransCanada's statement that neither TransCanada nor its expert witnesses were aware of any decisions of Canadian regulators where allocation of accumulated depreciation was specifically contested and approved.

Gaz Métro took issue with TransCanada claiming that they had an exchange with their auditors about the acceptability of the depreciation proposal under GAAP but objecting to the auditors appearing as a witness to answer to the content of the supposed exchanges.

Gaz Métro argued that the methodology used in calculating and allocating the $1.2 billion transfer was arbitrary as it was determined internally by TransCanada, without being supported by any precedents that that would make it possible to evaluate the validity of that methodology or the existence of alternative methods. Further, Gaz Métro noted that Gannett Fleming was not asked to provide an opinion on the merits of the formula used to calculate the CSV, or to discuss alternative approaches, despite TransCanada's allegations that the transfer is in compliance with an established practice.

Gaz Métro noted that TransCanada used the concept of alignment as a rationale for the transfer of accumulated depreciation; however, Gaz Métro argued that TransCanada has not shown, with supporting calculations, the overall improvement to the system resulting from the alignment.

Gaz Métro argued that the transfer does not ensure the economic viability of the Mainline. When viewed over the long term, the transfer does not lead to any real reduction in the Mainline depreciation expense or in the tolls charged to shippers. While the immediate effect of the transfer is to increase the amount of undepreciated capital in the Prairies and Eastern Triangle by $1.2 billion, when combined with the longer estimated economic life of these two segments, the

transfer significantly lengthens the recovery period for this undepreciated capital. The result is a significant deferral of depreciation costs to be borne by future generations of shippers and an increased risk of non-recovery of this capital given the preponderance of the evidence with respect to current and projected utilization of the Mainline. Therefore, Gaz Métro argued that the transfer cannot constitute an element in a lasting solution to the problem of excess capacity plaguing the Mainline and the NOL in particular.

Talisman

Talisman submitted that TransCanada's proposal to transfer accumulated depreciation was a thinly veiled attempt to preposition the Mainline for a stranded asset case and an attempt by TransCanada to reduce its risk exposure to underutilized facilities. Talisman stated that TransCanada's proposal just shifts costs rather than attempting to deal with TransCanada's fundamental problem of an excessive cost structure for its current and foreseeable business needs. Talisman further stated that transferring accumulated depreciation would simply complicate matters when TransCanada files to transfer these facilities out of the Mainline for oil conversion. Therefore, Talisman argued that reallocating accumulated depreciation among the various Mainline segments does not make any practical sense at this time.

Tenaska Marketing Canada (Tenaska)

Tenaska opposed the proposal to transfer accumulated depreciation and stated that it agreed with the reasons given by CAPP and other parties on why the proposed transfer was not appropriate.

Union

Union expressed its concerns about the transfer of accumulated depreciation and provided further argument on the issue. Union stated that the proposed shift in accumulated depreciation is merely an attempt to transfer the costs associated with serious underutilization to the other parts of its system. Union noted that this was contrary to NEB precedent dealing with serious underutilization of facilities as evidenced in the Board's RH-1-77, RH-2-76 and RH-R-1-78 Decisions.[32] Union submitted that the appropriate way to deal with the NOL issue is to properly reflect its costs and accumulated depreciation on the books and deal with the excess costs directly, rather than shifting costs to another segment to mask the underutilization problem. Union submitted that TransCanada should not be permitted to use this deprecation shift to reduce the price paid for any section of the NOL sold or transferred to an affiliate or used by itself for oil service. Union also stressed that GAAP must not be overridden.

ADOE

ADOE did not take a position with respect to TransCanada's depreciation proposal. However, it indicated if this proposal were accepted, it would request that the Board ensure that the proposal does not prejudice shippers should TransCanada decide in the future to segment the Mainline or convert portions of the Mainline to oil service.

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[32] National Energy Board, Reasons for Decision, RH-R-1-78, Interprovincial Pipe Line Limited, Review, March 1978.

Ontario

Ontario accepted TransCanada's proposed reallocation of accumulated depreciation. However, Ontario clarified that it would not support TransCanada's depreciation proposal should it be used as a tool to lower the net book value of Mainline assets for the sole benefit of transferring certain Mainline assets to oil service. Ontario supported APPrO's request that TransCanada preserve records that would allow the unscrambling of the net book values of Mainline assets affected by the transfer of accumulated depreciation. Ontario added that it wishes to ensure that should any repurposing of Mainline infrastructure take place in the future, it not be done at the expense of natural gas shippers. Ontario requested the Board append a condition to an approval of TransCanada's depreciation proposal, ensuring that any repurposing of Mainline assets would trigger a comprehensive audit detailing the effect this proposal would have had on the net book value of the affected assets.

Ministère des Ressources naturelles et de la Faune – Gouvernement du Québec (Québec)

Québec opposed the proposed transfer of accumulated depreciation. Québec stated that although TransCanada currently treats depreciation on a system wide basis, the Mainline could eventually be segmented. In that case, the proposed transfer of approximately $500 million in accumulated depreciation from the Eastern Triangle to the NOL exposes Québec's natural gas consumers to additional costs for decades to come.

Québec also opposed intervenor proposals that suggest creating deferral or long-term adjustment accounts, as these proposals defer expenses into the future. Québec argued that a toll structure should give shareholders a reasonable opportunity to earn their projected return on investment, not an absolute assurance of that return in financially difficult times. Québec suggested that the Board should clearly state that when there is surplus capacity, all participants would have to share the resulting costs. Québec stated that it would like the NEB to examine the possibility of referring this matter to an advisory committee that would be mandated to develop a methodology that links a monetary value to excess capacity.

TransCanada's Reply

With regard to intervenor submissions that TransCanada is not treating all segments equally, TransCanada stated that an adjustment to the NOL's depreciation reserve was considered necessary as the time remaining for recovery of capital on the NOL is much shorter than in the case of the Prairies and Eastern Triangle segments.

In response to claims that the *Kern River* and *Williams* cases do not support TransCanada's proposal, TransCanada replied that both cases are relevant, as it is the principle for reassigning accumulated depreciation developed by the FERC in these cases that matters -- not the specific facts in either case. TransCanada submitted that the *SCE&G*, *Equitable* and *Northern Natural* cases cited in the MAS evidence only demonstrate that reallocation is not allowed when certain criteria are not met. In these three cases, the FERC was concerned with:

(1) transfers of the depreciation reserve between different functionalized plant accounts (*SCE&G*);
(2) a transfer of accumulated depreciation to retained earnings (*Equitable*); and
(3) transfers between segments that are not contiguous or connected and where the shippers that pay for one segment were different than the shippers that paid for the other segment (*Northern Natural*).

TransCanada stated that the issues in these cases are very different from the issues on TransCanada's Mainline facilities.

In response to MAS' claim that TransCanada's proposal is not in accordance with GAAP, TransCanada replied that there is no U.S. GAAP accounting standard that prescribes when or how an accumulated provision for depreciation should be apportioned between an entity's depreciable assets. In response to the claim that TransCanada's proposal was retrospective, TransCanada submitted that its proposal was not retrospective according to the three Financial Accounting Standards Board criteria that specify what constitutes retrospective treatment. TransCanada stated that its proposal does not have a cumulative effect on net income or overall accumulated depreciation reported in prior periods, there is no offsetting adjustment to the opening balance of retained earnings, and financial statements for each individual prior period presented in TransCanada's comparative statements are not being adjusted. Therefore, the proposal is not retrospective, but is instead, prospective.

TransCanada disagreed with MAS' contention that the general principle under the GPUAR is not to allow transfers of accumulated depreciation. TransCanada replied that while subsection 56(2) of the GPUAR requires Board approval of material transfers of accumulated depreciation between groups, that provision does not create a general principle that transfers are not allowed. In TransCanada's view, the existence of the provision indicates that some circumstances may warrant transfers.

TransCanada stated that the acceptability of its proposal should not be based on whether it is permitted under U.S. GAAP but rather on whether it reasonably apportions the accumulated depreciation between the segments in a sound and rational way, results in more relevant accounting information needed for the regulation of TransCanada looking forward, and helps achieve the goals spelled out in its Application. TransCanada further stated that the regulator's interest in the financial accounting requirements for depreciation is secondary. The regulator's primary interest is to ensure that the accounting recognition of depreciation follows and supports its ratemaking determinations. Regulators make rate determinations regarding depreciation first, and then the accounting conforms to the ratemaking. TransCanada took the position that its depreciation proposal is GAAP-compliant, and even if it were not, it would become so when the Board approves it.

In response to MAS' claim that the transfer would unfairly allocate the costs and risks of the NOL to the shippers on the Prairies and the Eastern Triangle segments, TransCanada submitted that the Mainline's historical tolls have been calculated to recover the cost of service on an annual basis. TransCanada views the Mainline as an integrated system and the tolls associated with each service recover the costs associated with providing that particular service for that time period and are not related to individual assets. TransCanada stated that the payment of tolls does

not convey any ownership rights or future considerations to shippers, as confirmed by the Board in GH-5-89.[33] Shippers pay for service, not assets. Therefore, there would be no impact on either the Prairies or Eastern Triangle shippers or on any intergenerational impacts as a result of the transfer. TransCanada argued that MAS wants toll segmentation of the Mainline into the Prairies line, the NOL and the Eastern Triangle. TransCanada further argued that MAS oppose the reallocation of accumulated depreciation because the reallocation would increase the amount of rate base in the Eastern Triangle over what it would otherwise be, so that, other things equal, segmented short-haul tolls on the Eastern Triangle would be higher than they would otherwise be.

TransCanada denied allegations made by some intervenors that the transfer was being proposed with a view to lowering the net book value of the NOL for potential conversion of the NOL assets for oil service. TransCanada submitted that if it was successful in bringing forth a proposal to redeploy assets, the transfer value of those assets would be subject to the approval of the Board and would involve the determination of an appropriate transfer price. TransCanada further submitted that a potential conversion to oil service may involve assets taken out from all three segments of the Mainline, and that at the present time, it does not know which assets would be involved. TransCanada stated that if an application for conversion goes forward, TransCanada would provide information on the net book value of assets with and without the reallocation of accumulated depreciation.

Views of the Board

We heard conflicting evidence on the subject of whether the depreciation proposal is in compliance with GAAP. While we strive to make decisions that are consistent with sound depreciation fundamentals and accounting standards, such standards are not binding upon the Board in ratemaking considerations. There may be cases where the Board could depart from GAAP if justified from a regulatory ratemaking perspective. In this case, however, the question of compliance of the depreciation proposal with GAAP has not influenced our ultimate decision.

We do not find the *Kern River* and *Williams* cases to be particularly relevant or supportive of TransCanada's proposal to transfer accumulated depreciation. The *Kern River* case involved a breakout of accumulated depreciation reserve for turbine engines from compressor station equipment, due to differences in depreciation rates between turbine engines and compressor stations. The *Williams* case involved the breakout of Williams' Offshore Gulf of Mexico gathering system into individual facilities, and consequently the breakout of the accumulated depreciation reserve. We are of the view that the reasons for the *breakout* of depreciation reserve in both the *Kern River* and *Williams* cases are not similar to the reason why TransCanada is proposing a *reallocation* of depreciation reserve, and therefore, did not assign weight to these cases. We also assigned little weight to the *SCE&G*, *Equitable* and *Northern Natural* cases referred to by MAS as these cases involved transfers that were rejected by the FERC for reasons that are not directly comparable to TransCanada's reason for transferring accumulated depreciation.

[33] National Energy Board, GH-5-89, Reasons for Decision, TransCanada PipeLines Limited, Facilities, Tolls and Export Licences, November 1990.

With respect to TransCanada's use of CSV, we view the concept to be more relevant to a unit-of-production (or unit-of-throughput) depreciation method, rather than with the straight-line depreciation method used for the Mainline. Even if we were to accept TransCanada's reasoning behind the need to align the CD within each segment with its CSV, the Board notes that the proposed transfer of accumulated depreciation would perfectly align the CD with the CSV of the NOL segment, but worsen the same alignment for the Prairies and Eastern Triangle segments. We were not persuaded that a 100 per cent CD to CSV alignment for the NOL segment to the detriment of the Prairies and Eastern Triangle segments collectively results in better alignment of CD with CSV for the whole system. Moreover, we are of the view that relying on the CSV could add an element of uncertainty to future toll setting, as the denominator used to calculate the CSV would vary with changes in forecasted throughput. Our view is that if there is a concern that an asset's remaining useful life could be shorter than originally estimated such that the recovery of capital may be jeopardized, the more appropriate way of dealing with the issue is to adjust the asset's EPH.

With respect to a potential conversion of Mainline assets to oil service, we note that it is not yet known whether this will happen and which assets would be involved in the conversion. Although TransCanada has stated that, if it brings forward an application for oil conversion, it would provide the net book values of affected assets before and after the accumulated depreciation shift, we note TransCanada's admission that given the uncertainty of the timing of oil conversion, unscrambling the net book values of assets could be difficult as it would involve double-bookkeeping for many years. Therefore, we find that the transfer of accumulated depreciation would have an uncertain, but potentially significant impact if, in the future, part of the Mainline is redeployed for oil service.

We also recognize the potentially significant effect from such a material transfer of accumulated depreciation if, in the future, the Mainline moves to segmented tolling. TransCanada stated that it is not considering segmentation for tolling purposes at this time, but admitted that it may make sense in the future. If that were to occur, the permanent step of transferring accumulated depreciation now may adversely impact users of the Prairies and Eastern Triangle segments as they would be paying higher tolls that reflect a larger rate base in these two segments as a consequence of the transfer.

Furthermore, the transfer of accumulated depreciation between segments may have a significant impact, if and when, the Board needs to make a determination regarding stranded investment on the Mainline.

We are concerned about the transparency of TransCanada's proposal and how the transfer of accumulated depreciation may affect future cases of stranded investment, segmented tolling or conversion of assets to oil service. While we accept that the depreciation proposal results in a lower depreciation rate and consequently lower tolls for all Mainline shippers in the near term, for all the reasons noted above, we do not believe that given the current circumstances, the reallocation is an appropriate tool to achieve the desired outcomes. Therefore, we are not prepared to approve the proposed transfer of accumulated depreciation.

Decision

We deny TransCanada's proposed transfer of accumulated depreciation among the Prairies, Eastern Triangle and NOL segments.

Chapter 6

Alberta System Extension

Views of TransCanada

TransCanada applied to extend service on the Alberta System. NGTL would implement the Alberta System Extension (Extension or ASE) by contracting on an annual basis for standard one-year term FT service:

- on the Mainline from Empress to the Saskatchewan/Manitoba border (SMB);
- on the Foothills System Zone 8 from the Alberta/B.C. border to Kingsgate, B.C.; and
- on the Foothills System Zone 9 from McNeill to Monchy, Saskatchewan.

Table 6-1 Forecast 2012 TBO Contract Quantities and Annual Cost

TBO	Contract Quantity (TJ/d)	Annual Cost ($million)
Mainline Empress to SMB	2,800	356
Foothills Zone 8 Alberta/B.C. border to Kingsgate	1,900	65
Foothills Zone 9 McNeill to Monchy	1,600	46
Total	**6,300**	**467**

TransCanada submitted that the Extension is consistent with the established practices of both NGTL and the Mainline regarding contracting for service on other pipeline systems. NGTL would implement the Extension using the TBO mechanism, which would require NGTL to contract for standard utility service on the Mainline and Foothills System, similar to any other customer. However, TransCanada submitted that NGTL's TBO policy would not apply to the Extension.

TransCanada submitted that the Extension would reduce transportation costs between the WCSB and downstream markets on the TransCanada Pipeline Systems, especially from the NIT transaction point in Alberta to Mainline markets in eastern Canada. TransCanada expected the Restructuring Proposal would result in more transactions occurring at NIT, increase the price of gas at NIT by $0.17/GJ to the benefit of WCSB producers, and encourage annual firm service contracts on all three systems.

TransCanada submitted that the Alberta System's rates would continue to be cost-based and the rates would be designed in the same manner as they are currently, including reflecting distance. In TransCanada's view, the common ownership of the Alberta System, the Mainline and the Foothills System (in this chapter collectively referred to as "the System") by TransCanada facilitates the Extension, but is not the result of any market power being exercised by the Alberta

System. TransCanada submitted that the exercise of market power implies that the Alberta System would be raising its rates above an otherwise just and reasonable level, which is not the case.

TransCanada proposed to continue using the existing Alberta System toll design although some parties were opposed. To avoid an unintended cost consequence to NGTL firm transportation – points-to-point (FT-P) shippers arising out of the Extension, TransCanada proposed three modifications to the service: a change to the fuel allocation, elimination of the minimum contract demand quantity, and an increase to the FT-P adjustment.

In an information request, the Board asked TransCanada how it would be appropriate to continue using the existing toll design given the Board's practice to treat negotiated settlements as a package. TransCanada replied that it was not making changes to the toll design, that the toll design is robust and that any concerns could be addressed in subsequent rate design proceedings for the Alberta System. TransCanada indicated treating the settlement as a package was appropriate at the time of implementation, but the fact it was negotiated does not mean that future changes could not be considered or made.

TransCanada submitted that the primary purpose of the Extension is to enhance the economic viability of the Mainline and WCSB. However, TransCanada acknowledged that enhancing the economic viability of the Mainline and WCSB is not part of the utility service provided by the Alberta System. TransCanada indicated that the NGTL Code of Conduct Code does not preclude NGTL from working with its regulated affiliates to develop and seek Board approval of proposals such as the Extension.

TransCanada submitted that stakeholders of the Alberta System, the Foothills System and the Mainline have benefited as a result of the merger between NGTL and TransCanada. Alberta System shippers benefited and continue to benefit from operating cost reductions, whether or not they also used services on the Mainline or the Foothills System.

TransCanada indicated the allocation of costs to Alberta System users would be appropriate given:

- the benefits Alberta System users derive from the Mainline and Foothills System;
- the benefits Alberta System users would derive from the Restructuring Proposal; and
- the associated cost responsibility of the Alberta System for the Mainline and Foothills System.

TransCanada submitted that all three of its pipeline systems are dependent on WCSB supply, and the WCSB is dependent, to a large extent, on the three pipeline systems for transporting gas to market. Because of the interdependency, TransCanada submitted it should pursue opportunities within the three integrated pipeline systems as a whole, so long as such approaches are reasonable and equitable, produce sufficient benefits and are consistent with the public interest. TransCanada submitted that the Board should first consider whether the Restructuring Proposal is in the public interest, and then determine whether the proposed tolls and toll methodology are just and reasonable.

In argument, TransCanada raised the Board's RH-1-2005 Spearhead Decision (Spearhead)[34] as precedent for the Extension, or for including in the revenue requirement of one pipeline, the costs of another pipeline. In *Spearhead*, Enbridge, upon CAPP's request, applied to the Board for approval of a Non-Routine Adjustment to collect US $10 million a year for five years from shippers on Enbridge's Canadian mainline system that it would transfer to the Spearhead Pipeline Project, which would extend service to the Cushing, Oklahoma area. TransCanada submitted that in that case the benefits that would be derived from the surcharges (improved netbacks for producers by getting better access to markets) were the sole basis of its justification. The Board found it prudent for Enbridge to incur these costs, as the costs would result in general benefits to the Enbridge system and its shippers, and that it was reasonable that the costs be included in Enbridge's annual revenue requirement and recovered from all shippers based on Enbridge's Board approved toll design.

TransCanada argued that, while cost causation is one of the primary principles applied by the Board in establishing just and reasonable tolls, there is no reason why a component of a toll that is justified primarily on the basis of the benefits received by the toll payer and the broader public interest cannot result in a toll that is equally just and reasonable. However, TransCanada acknowledged that the Board has broad latitude in establishing just and reasonable tolls and there is no mandate that benefits be considered in reaching this determination.

Cost Causation or User-Pay

TransCanada submitted the Extension does not violate cost causation/user-pay principles. However, in cross-examination TransCanada acknowledged that its Application departs from the user-pay principle.

TransCanada approached the issue of cost causation and public interest from the perspective of looking at the Mainline, Alberta System, and Foothills System without regard to how those components existed prior to becoming part of "a single undertaking" under one regulator. TransCanada submitted the paramount objective should be to spread all of the costs over all of the usage on the systems in a manner that best balances the objectives of the tolling principles and the public interest. Considering the Alberta System, Mainline and Foothills System as a single undertaking, TransCanada concluded that the Extension reasonably balances the cost responsibility among the Systems' shippers, and provides the opportunity to improve the long-term economic viability of the Systems and the WCSB.

TransCanada relied on the Board's GH-5-2008 Decision[35] in which the Board found that "...the Alberta System, the Mainline and the Foothills System are a single undertaking..." However, TransCanada's witnesses were uncertain whether that finding has anything to do with the tolls to be charged for service on the three different systems. TransCanada understood that in GH-5-2008 the Board was deciding whether the Alberta System was within Canadian federal jurisdiction. TransCanada acknowledged that it stated during that proceeding, "TransCanada

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[34] National Energy Board, RH-1-2005, Reasons for Decision, Enbridge Pipelines Inc., Tolls, June 2005.

[35] National Energy Board, GH-5-2008, Reasons for Decision, TransCanada PipeLines Limited, Jurisdiction and Facilities, February 2009.

does not propose that the issuance of a certificate will affect either toll design or tolls for service on the Alberta System."

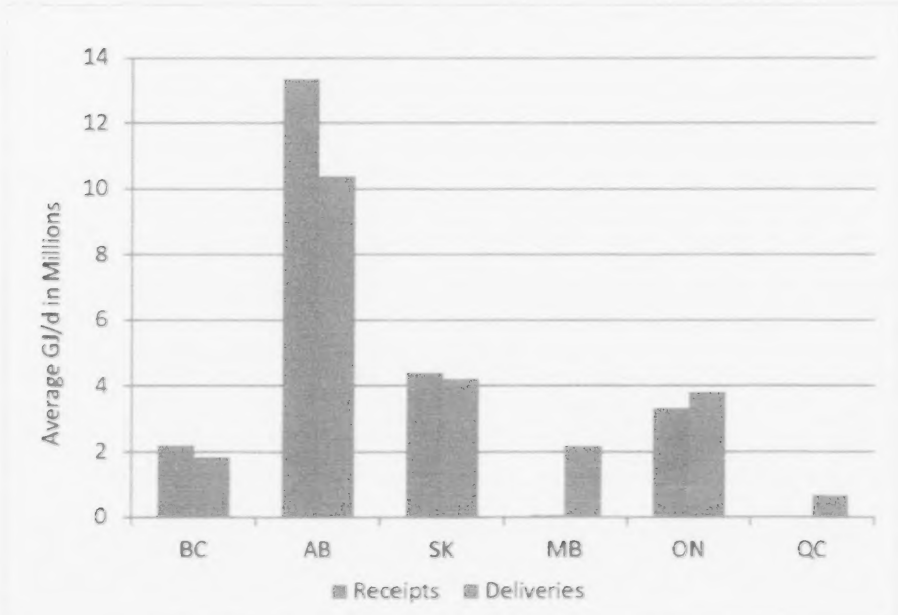
According to TransCanada, the Extension reflects the function of the segments of transmission facilities across the System and groups facilities with common functions into cost pools, without regard to which corporate entity within the System holds title to the facilities. In that sense, TransCanada indicated the Extension better reflects cost responsibility than a proposal that separates costs based on corporate identity, since it is the function of the pipe which determines the cost pool to which an individual segment's costs will be assigned.

Supply Area Consolidation

TransCanada projected limited receipts on the Mainline in Saskatchewan, but submitted that WCSB production exists in Saskatchewan and surrounds the supply corridor that the Extension would serve. If service were extended, all WCSB gas connected to the TransCanada Pipeline Systems could directly enter the NIT market and all TransCanada Pipeline Systems paths out of the WCSB could use the same delivery service.

TransCanada provided data about receipts and deliveries in 2011 in each province and on each system, which is graphically represented in Figure 6-1.

Figure 6-1 Foothills, Alberta System and Mainline 2011 Receipts and Deliveries



Views of Intervenors

Ontario supported the Extension. ANE and MAS supported the principle that all parties who benefit from the Mainline should contribute toward lowering Mainline tolls, but took no position on whether the Extension is the preferred way to achieve such a contribution from WCSB producers.

TransGas submitted the toll impacts of the Extension would be beneficial, but also took no position on the Extension. ATCO Gas and Pipelines Ltd. (ATCO Gas)was opposed to any impacts on intra-Alberta customers.

APPrO, CAPP, IGCAA, the Small Explorers and Producers Association of Canada (SEPAC), WEG, Apache, BP Canada Energy Group ULC (BP), Cenovus Energy Inc. (Cenovus), Centra, ConocoPhillips Canada, Devon Canada Corporation, EnCana Corporation (Encana), Enerplus, Goreway Station Partnership LP, Husky, Talisman, Tenaska, ADOE, the British Columbia Ministry of Energy and Mines (B.C. Ministry), and the UCA were all opposed to the Extension. Many intervenors submitted that the Extension would be contrary to the public interest and would not result in just and reasonable tolls. They urged the Board to reject it.

TBO

Several intervenors submitted that the TBO contracts for the Extension were not requested by shippers, are not necessary to move gas through the Alberta System and do not provide new physical access to markets. Therefore, the Extension does not conform to NGTL's TBO policy or TransCanada's Mainline TBO policy. They submitted that no independently minded pipeline would enter into TBO contracts of this nature. Further, they indicated the Extension raises issues around the NGTL Code of Conduct and the prudency for NGTL to enter into such a commercial arrangement.

Alberta System and NIT Impacts

Tenaska submitted that in substance, NGTL would buy FT service from the Mainline for about $0.35/GJ. It would effectively resell that capacity to a subset of Alberta System shippers for about $0.15/GJ and charge the $0.20/GJ difference to all Alberta System shippers, including those that do not use or rely on the Mainline facilities. This includes producers that use only Alberta System receipt services and related production-area transmission facilities, and potentially intra-Alberta consumers that use only intra-Alberta delivery services and related facilities.

CAPP stated that the Extension would move Mainline costs upstream of the NIT pricing point such that producers would absorb that cost increase. Pipeline tolls from Alberta System receipt points to markets served by TransCanada only appear lower under the Extension because costs would be spread over the larger volume of Alberta System receipts. The tolls to markets served by the Alberta System, but not by the Mainline or Foothills System, would be higher under the Extension.

APPrO submitted there is no certainty that the increase in Alberta tolls would be offset by increases in the value of natural gas at NIT, or that it could be accurately measured. The actual impact of the Extension on all market participants is not clear. CAPP indicated, based on an understanding of TransCanada's and Wood Mackenzie's model, TransCanada's suggested price uplift is speculative at best.

Several intervenors, including APPrO, CAPP, IGCAA, ATCO Gas, Tenaska and the B.C. Ministry, were concerned about increased tolls for most Alberta System shippers. Tenaska indicated the average receipt toll would increase by about 30 per cent; and, under different volume and cost scenarios, the Alberta System's intra-Alberta delivery tolls could increase as well. IGCAA noted that intra-Alberta consumers are already paying for the unutilized portions of the Alberta System that were constructed for ex-Alberta flows.

Tenaska noted that when looking at tolls from NIT to Enbridge CDA in 2012 under the restructuring proposal tolls are $1.33/GJ lower than the Status Quo tolls. However, removing the Extension from the restructuring case only raises tolls $0.17/GJ. Tenaska indicated running the throughput model under alternative scenarios with only that minor toll difference would isolate the impact on the NIT price that comes from implementing the Extension, but TransCanada has not done that. Therefore, in Tenaska's view, TransCanada has not demonstrated that the Extension by itself would have any meaningful impact on NIT prices, and there is no reason to believe that the Extension would create any net benefit for producers.

WCSB Impacts

MAS disagreed with TransCanada that one of the central public policy considerations that should inform the Board's decisions in this Application is the protection of the long-term viability of the WCSB. Rather, the Board should be concerned about enhancing the long-term viability and competitiveness of the regulated activities that fall under its jurisdiction. According to MAS, those activities are the transportation services provided by TransCanada on the Mainline, and not the production activities of specific producers.

In IGCAA's view, the Extension would not increase throughput on the Mainline or serve to enhance gas supply in the WCSB. IGCAA submitted that failing to provide these expressed theoretical benefits, the Extension will simply result in a wealth-transfer, or cross-subsidization of the Mainline and Foothills Systems by Alberta System customers. IGCAA indicated it was concerned that the estimated impact on intra-Alberta consumers may be a best case outcome and that the actual and ongoing results will be negative both from a direct rate and fuel basis and from a delivered price of gas basis.

CAPP noted that WCSB producers are also being impacted by increased U.S. Lower 48 gas supplies and the emergence of such supplies closer to eastern markets. Therefore, the burden of costs associated with the Extension would exacerbate this difficult economic situation making the Extension wrong and harmful. CAPP submitted producers invest their own money to explore for and produce natural gas in the WCSB. Producers are in a better position than TransCanada to judge whether the Extension will benefit the WCSB. CAPP indicated it is not aware of any producers who support the Extension.

Several intervenors were concerned about the potential for unintended consequences of the increased costs to producers from the Extension. For instance, CAPP asserted the Extension is not a benefit to Canadian producers or the WCSB. Rather, it is harmful and fundamentally alters the costs and risks to which producers understood they were exposed when they did business with NGTL, and, investment in the WCSB will almost certainly be affected if the Extension is approved. Centra submitted the Extension contributes to greater market and contractual uncertainty and this increased uncertainty may translate into higher premiums to be paid by Centra and its ratepayers. Tenaska submitted that implementing the Extension would destabilize the market and make the Mainline a riskier and more costly place to do business. As a result, it would be much more difficult for market participants to effectively and economically serve competitive markets at downstream points on the Mainline, and generally push gas off of the Mainline and onto the Gas Transmission Northwest and Northern Border pipelines.

Tolling Principles

Many intervenors, including CAPP, IGCAA, Tenaska, ADOE and the B.C. Ministry, submitted that the Extension violates the fundamental regulatory principle of cost-based/user-pay tolling, which is one of the Board's core tolling principles. They indicated this principle is fundamental to avoiding tolls that would be unduly discriminatory, as the Board clearly articulated in its RH-1-2007 Decision:

> That to the greatest extent possible, users of a pipeline system should bear the financial responsibility for the costs caused by the transportation of their product through the pipeline.

ADOE stated that cost causation is necessarily based upon a relationship between the gas actually being moved and the facilities being used to move it. That relationship does not exist between gas on the Alberta System, and the Mainline or Foothills System, until such point as some gas leaves the Alberta System and separately contracts for service on one of those systems. In ADOE's view, it would be a direct violation of the core tolling principle of cost-based/user-pay tolls to require the upstream system to incur downstream costs because the downstream system provides a market for some of the gas. ADOE indicated it would be akin to arguing that Alberta System shippers should somehow be responsible for a power plant in Ontario, a receiving system on the U.S. side of the border, or the gas system of Toronto itself, since all of those businesses facilitate the growth of the market for gas produced in western Canada. ADOE submitted that it is easy to concoct increasingly absurd examples of what TransCanada's theory could be used to justify. The open-ended nature of this departure from cost causation highlights how important it is to relate the costs used in setting tolls to the service actually being provided with those costs.

Public Interest and Cost Responsibility or Benefits Derived

CAPP submitted that imposing an inappropriate change in the cost structure on which investment decisions have been made, after the fact, violates a fundamental economic bargain and is contrary to the public interest. CAPP indicated it is not in the public interest to depart from the

fundamentals of the market system and regulatory principles to facilitate TransCanada's objective of shifting costs and risk. It is fundamental that a pipeline's revenue requirement is based on its cost – not the cost of other pipelines that may be related or affiliated.

CAPP stated that, just as each party in the value chain is responsible for its investment decisions and the risks inherent in them, none of the downstream pipelines or distribution systems have any claim against a producer for their costs simply because of their role in completing the links in the value chain. Equally, the producer has no claim on these downstream parties for its costs. CAPP indicated cost responsibility between parties is determined by contract and the ultimate risk of investment in each link in the value chain rests with each owner. According to CAPP, the existing business and regulatory framework, which includes the structure of markets, regulation and arrangements made throughout the value chain, is integral to the public interest. For the natural gas business to continue and make investment decisions that result in Canadian investment, it is necessary that the integrity of the business and regulatory framework be maintained. Similarly, open, stable and transparent commitments that underpin the benefits of natural gas production, transportation and distribution must also be maintained. In CAPP's view, costs of downstream pipelines such as the Mainline that are shifted upstream to Alberta system customers because of unilateral and inappropriate decisions by a common parent disrupt this structure and in so doing harm the public interest.

CAPP further submitted that TransCanada is treating the Alberta system as a financial backstop for the Mainline and Foothills System, both now and into the future. TransCanada estimated that the Extension would still be a burden to NGTL in 2020 and that the cumulative cost to Alberta System shippers for the Mainline portion of the Extension would exceed $3.6 billion. CAPP indicated producers have not agreed to backstop the Mainline and Foothills System; in fact, they are adamantly opposed to such backstopping.

Similarly, as expressed by several intervenors including ADOE, CAPP and ATCO Gas, Alberta System shippers have no responsibility or obligation, contractual or otherwise, for the recovery of Mainline or Foothills System costs or for backstopping the Mainline. CAPP noted that in GH-5-89, the NEB found that it "agrees with those who submitted that the payment of tolls confers no future benefit on toll payers beyond the provision of service. In other words, previous toll payers have no acquired rights." In CAPP's view, if toll payers have no acquired rights, then once a toll payer's contract expires, they have no acquired obligations to pay the Mainline's costs. CAPP submitted that with the Extension, producers who have never contracted to ship on the Mainline or Foothills, as well as producers whose contracts to ship on the Mainline and Foothills System have expired, certainly have no obligation to pay the Mainline's or Foothills' costs. As indicated by several intervenors, there is no such thing as an acquired obligation, either implied or by way of the public interest.

IGCAA noted that the TransCanada/NGTL merger was subject to a Merger Cost Benefit Agreement, which carefully tracked and allocated costs and benefits for each of the three pipelines to ensure customers of each respective pipeline neither paid too little nor too much of the costs, nor received too little nor too much of the benefits. In IGCAA's view, there was no outstanding debt to pay at the termination of the Agreement.

Spearhead Decision

In response to TransCanada's arguments about *Spearhead*, several intervenors noted that Enbridge, at the request of producers, sought to provide limited support of $10 million per year for five years to relieve a pipeline bottleneck and push the reach of Canadian oil into new U.S. markets. One company upstream of the bottleneck opposed the proposal. Intervenors submitted that the benefits to the Enbridge oil pipeline and its customers of removing a bottleneck are obvious in terms of improved use and efficiency of the Enbridge pipeline. In CAPP's view, the proposal was a win for everyone, most importantly shippers on the Enbridge mainline. Talisman argued the toll impact of 2.2 cents in *Spearhead* was an inconsequential 1.5 per cent of the existing Enbridge toll of $1.40 per barrel. The Board concluded that "based on the high level of support for the Enbridge proposals and the relatively small increment to the Enbridge tolls, the toll impact [seemed] to be fair."

In contrasting *Spearhead* with the present case, CAPP argued that the Extension has no customer support. Producers, Alberta consumers and Alberta and B.C. governments are uniformly opposed to the Extension. No new markets are being developed; and as argued by Talisman, the Extension adds approximately 30 per cent to the Alberta System's revenue requirement but meets no need of the Alberta System. CAPP further argued the Extension fails to meet the test of being reasonably and prudently incurred in relation to the operation of the Alberta System and the service it provides to its shippers. In CAPP's view, the distinction between *Spearhead* and the present case is clear: *Spearhead* met the test of need from the perspective of Enbridge and its shippers, whereas the Extension does not.

Affiliate Interactions

IGCAA noted that in 1998, as part of the Alberta Energy and Utilities Board hearing pertaining to the merger of NOVA and TransCanada, NOVA and TransCanada stated "[t]he corporations involved in the merger are distinct corporations. This will not change as a result of the merger." IGCAA indicated TransCanada reiterated this fact in proceeding GH-5-2008 where it stated that the "TransCanada Alberta System, TransCanada Mainline, TransCanada Foothills System ... are separate works" and "[s]eparate companies exist for the Alberta System, the TransCanada Mainline and the Foothills Systems for various historic, tax and other reasons." Notwithstanding TransCanada's equivocation, IGCAA expressed that the three systems are unique utilities, separate companies and separate works. The NGTL Code of Conduct is intended to prevent NGTL from cross-subsidizing affiliate activities. IGCAA submitted TransCanada's suggestion that Alberta System customers are somehow responsible for the costs of the Mainline and Foothills Systems is inconsistent with the spirit and objectives of the NGTL Code of Conduct.

CAPP also discussed the NGTL Code of Conduct and indicated its purpose is to establish standards and conditions for interactions between NGTL and its Affiliates. Two of the parameters are: (i) to prevent NGTL from cross-subsidizing Affiliate activities and (ii) to avoid uncompetitive practices between NGTL and its affiliates, which may be detrimental to the interests of the Alberta System's customers. CAPP indicated the Extension would cross-subsidize the Mainline and Foothills System and that it is an uncompetitive practice that could only be achievable because NGTL has market power.

CAPP submitted that by extracting economic rent from the Alberta System's receipt customers, the Extension is an abuse of TransCanada's ownership position and the Alberta System's dominant market position as a WCSB gathering system. It is an affiliate transaction that has no regulatory basis or customer support. In CAPP's view, affiliate codes of conduct are intended to prevent abuse of affiliate relationships such as this unjustified cost shifting between the Mainline/Foothills and the Alberta System. The fact that the codes of conduct appear to have been disregarded was also of concern to CAPP. CAPP also noted that regulation has been designed to protect the users of a pipeline from affiliate abuse.

ADOE indicated the overall default case for U.S. pipelines is that they cannot hold and roll-in capacity on other pipeline systems, affiliated or unaffiliated. Therefore, the Extension is a major step backward in market evolution.

Supply Area Consolidation

IGCAA contended there is no causal relationship between the Alberta System and supply development in Saskatchewan that is directly connected to either the Mainline or the Foothills System. Saskatchewan supply was developed on its own merits based on the physical and economic realities of the separate regulated utilities to which it is connected. In IGCAA's view, an opportunity for Saskatchewan supply to access NIT is already available today as evidenced by the existence of receipt service at Empress and McNeill; however, the physical supply entering the Mainline and Foothills System is *de minimus*. IGCAA specified for 2012, the total incremental supply of 10 million cubic feet per day that would be added by the Extension at an annual cost of $467 million works out to a unit cost of $128 per thousand cubic feet or $134/GJ.

CAPP submitted the Extension cannot alter geography. Shifting costs around among affiliates does nothing to bring WCSB gas physically closer to the market. In CAPP's view, the gas is where it is and the markets are where they are. The distances have not changed, nor has the *total* cost of moving gas from wellhead to *all* end-use markets.

ADOE submitted that Saskatchewan producers and Alberta exporters both use the Mainline as a discrete long-haul route to eastern markets. The Extension would effectively make the Saskatchewan portion of the Mainline partially into a supply "header", but few if any seem to view this portion of the Mainline that way.

Rate Design and Services Settlement

CAPP and IGCAA, among other Intervenors, provided evidence about the key attributes of the Alberta System rate design and the impacts the Extension would have on the design. They submitted that adding the costs of the Extension to intra-Alberta consumers would render the Alberta System's rates of NGTL unjust and unreasonable. IGCAA submitted the rates are approved on the basis of a settlement, which the NEB approved as a package. According to IGCAA, there is no way the NEB can approve adding costs to Alberta consumers, absent a settlement, without considering whether the existing cost allocation methodology results in just and reasonable rates.

ATCO Gas and IGCAA were opposed to the proposed changes to the FT-P service. IGCAA submitted that changing the fuel allocation methodology by itself represents a material change to the Alberta System Rate Design and Services Settlement and alters the balance that parties were prepared to accept when they agreed to the settlement.

Views of the Board

In considering the Extension, parties before us differed on the standard that we should apply in reaching our determination. Part IV of the NEB Act empowers the Board to make orders relating to traffic, tolls or tariffs; and, sections 62 and 67 of the NEB Act specifically require that all tolls be just and reasonable, and not unjustly discriminatory.

We have considered the submissions of parties and concluded that the Extension will not result in just and reasonable tolls. In our view, the Extension violates acceptable tolling principles. Its effect is to unduly cross-subsidize the Mainline to enhance its competitiveness. We view the Extension as inappropriate cost shifting among affiliate companies that is contrary to sound tolling principles.

In our opinion, it would not be prudent for NGTL to enter into the TBO contracts required to implement the Extension. These contracts would increase the Alberta System's revenue requirement by approximately $467 million or 36 per cent. Alberta System shippers would be compelled to pay for a service that they did not request.

TransCanada submitted, among other things, that the Extension would enhance the viability of the Mainline and the WCSB. In our view, the viability of the Mainline does not and should not rest, in part or in whole, with Alberta System shippers. We are of the view that the responsibility for the viability of the Mainline rests with its owner. We are also of the view that the Extension would not enhance the competitiveness of the WCSB. On the contrary, WCSB producers in this proceeding indicated that the Extension would negatively affect capital allocation in the upstream industry to the detriment of the gas industry, and we agree. The Extension would alter the risk profile for all users of the Alberta System; and, in our opinion, it would significantly and unwarrantedly increase costs and uncertainty for the upstream industry.

We heard that, as part of the Restructuring Proposal, the Extension would increase the price of gas at NIT, and therefore, benefit WCSB producers. However, Alberta gas consumers who appeared before us indicated that higher gas prices would negatively affect them. Accordingly, we did not find the discussion about the impact on the NIT price to be helpful. In our view, the Extension is an inappropriate cross-subsidy that cannot be justified based on the impact on gas prices at NIT.

TransCanada contended that tolls can be just and reasonable even if a component of the toll is justified on the basis of the benefits received by the toll payer and the broader public interest. We reject this argument. We do not believe "benefits derived" is a

principle we should consider when setting tolls. This is contrary to the principle of "no acquired rights or obligations" that we believe must be upheld. Shippers' costs and benefits do not extend beyond a contract under which service was requested and made available. The Extension violates this principle and accordingly cannot produce tolls that are just and reasonable.

We recognize that in *Spearhead*, the Board justified including the costs of one pipeline in the revenue requirement of another pipeline. The Board is not bound by its prior decisions, and we believe the facts in *Spearhead* can be distinguished. In *Spearhead*, toll payers supported the additional costs, which were much less significant than the costs involved with the Extension. More importantly, it was necessary for toll payers to incur these costs so they could access new U.S. markets. Accordingly, we gave no weight to the *Spearhead* case in considering the Extension.

Since we have not approved the Extension, there will be no unintended consequences to FT-P shippers. Therefore, we do not find it necessary to consider making changes to the toll design on the Alberta System.

Decision

We deny the Alberta System Extension proposal.

Chapter 7

Mainline Toll Design Proposals

TransCanada proposed a number of changes to the Mainline's toll design and cost allocation. As described below, the proposed changes pertained to matters such as the size of the area within which delivery points are aggregated, how to allocate costs to different services and paths, how to toll services that use the TQM facilities in Québec, whether and how to spread costs over multiple years, and how to calculate distances of haul.

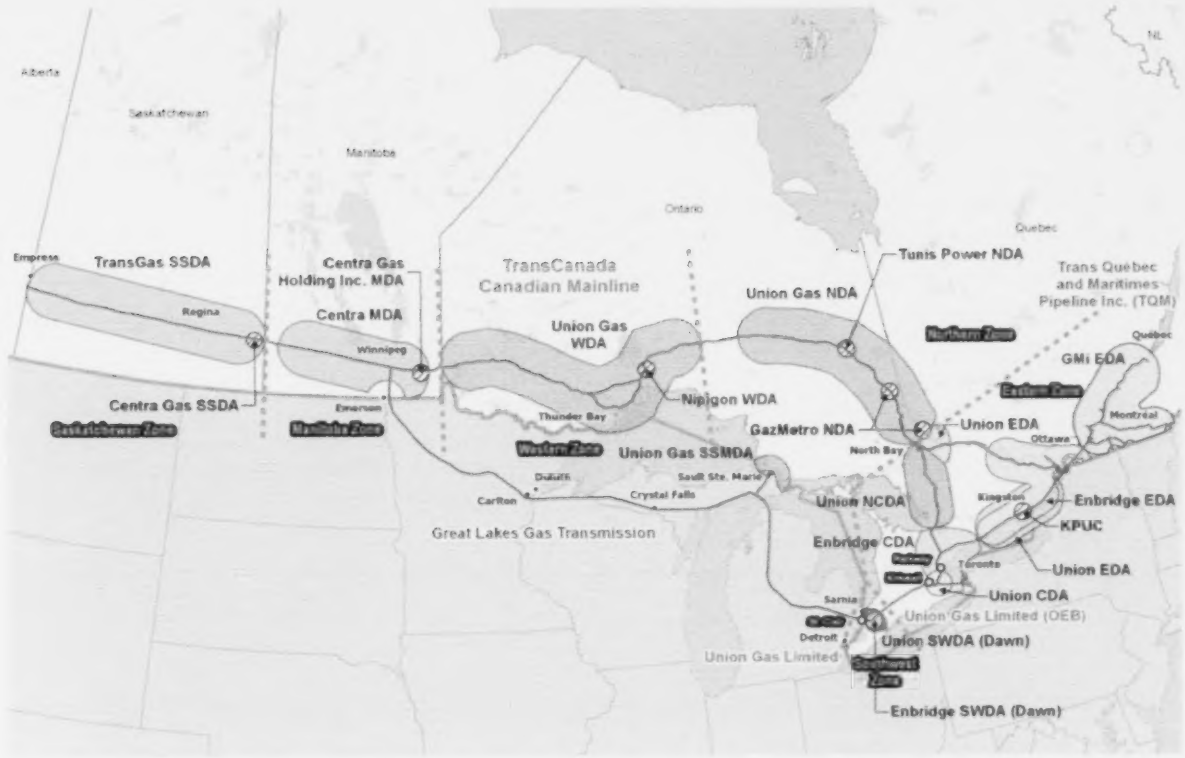
7.1 Elimination of Toll Zones

Domestic service on the Mainline is generally available for delivery to a Distributor Delivery Area (DDA), which aggregates as many as 44 individual meter stations. DDAs are based on the geographical franchise areas operated by the local distribution companies that are served by the Mainline. Many tolls for domestic Mainline service are based on the distance of haul to the load centre of the corresponding DDA, while others are based on the average distance to a more aggregated toll zone. The Mainline has six toll zones, with each zone comprised of between two and seven DDAs.

Specifically, any domestic service that originates at Empress, Alberta or in Saskatchewan is classified as domestic long-haul service, and is tolled based on the distance to the load centre of the zone within which the DDA lies. This means that the toll for long-haul service from a particular receipt point depends only on which zone the destination DDA is located within. Domestic service originating from any other locations east of Saskatchewan is categorized as domestic short-haul service, and toll zones have no bearing on short-haul tolls. Rather, short-haul tolls depend on the distance to the load centre of the DDA to which the gas is delivered.

Figure 7-1 shows the Mainline's six toll zones and various DDAs.

Figure 7-1 TransCanada Mainline with DDAs



Views of TransCanada

TransCanada proposed to eliminate the use of toll zones, and instead toll domestic long-haul service based on the distance to the load centre of each DDA. As described further below, TransCanada submitted that this would better reflect the cost-based/user-pay principle, send more accurate price signals to the market, and remove the incentive for some long-haul shippers to segment their long-haul transportation. Administrative processes, such as contracts, nomination practices, and system operation, would be unaffected since zones are only used for tolling purposes; all contracts and nominations for long-haul domestic deliveries are already at the DDA level.

TransCanada emphasized that even though there are significant distances between the load centres of the seven DDAs in the Eastern Zone, the long-haul toll to each DDA is the same. The largest such difference in 2011 was over 700 km, representing the distance between the load centre of the western-most Eastern Zone DDA (the Union NCDA) and that of the eastern-most DDA (the GMIT EDA). Similarly, the distance from Empress to the Enbridge CDA was over 500 km less than to the GMIT EDA. TransCanada showed that within the Eastern Zone in 2011, only the GMIT EDA had a load centre east of the Eastern Zone load centre. Since the current method charges the same long-haul toll to every DDA within a zone, eliminating toll zones

would mean that long-haul tolls would more accurately reflect the actual distance travelled, on average, to a DDA. This would mean that tolls would send more accurate price signals to the market, consistent with the Board's economic efficiency principle.

TransCanada submitted that toll zones disadvantage WCSB gas transported long-haul on the Mainline, relative to all other sources of gas and transportation options serving most eastern Canadian markets. TransCanada illustrated this with an example of gas serving the Toronto area. Toronto gas sourced from the Dawn supply hub pays a toll reflective of the actual distance travelled, whereas Toronto gas sourced from the WCSB using long-haul service pays a toll reflecting a distance to a point approximately 250 km beyond the Toronto market. Accordingly, TransCanada contended that toll zones impede the Mainline's ability to compete effectively in the key markets that are located in the western end of the Eastern Zone, where there are threats of bypass. TransCanada concluded that removing this disadvantage may help prevent further conversion of long-haul to short-haul and may encourage a return to long-haul contracting, thereby contributing to lower Mainline tolls. TransCanada submitted that the circumstances now facing the Mainline support a change in the long-haul tolling methodology.

TransCanada also contended that the zonal tolling method creates an incentive for markets located west of the zone load centre to move to short-haul service from long-haul service. TransCanada pointed to the 102 km increase in the Eastern Zone load centre between 2005 and 2011 as evidence of this.

TransCanada also indicated that eliminating toll zones, combined with calculating both short-haul and long-haul distances based on the shortest path, would eliminate the "free-riding" incentive for shippers to segment long-haul service into a combination of short-haul and long-haul service through certain DDAs. The Centra Manitoba South Saskatchewan Delivery Area (Centram SSDA), with a 2011 load centre 149 km east of the Saskatchewan Zone load centre, is currently used in this way. In 2011, a shipper going from Empress to Emerson, for example, would pay a toll that reflects 1,023 km if using only the long-haul service. If that shipper instead segmented that service through the Centram SSDA, the cumulative toll would instead reflect a distance of haul of approximately 874 km, or 149 km less. TransCanada estimated that in 2011, the free-riding from segmentation amounted to a loss of $45 million in revenues. Ending this segmentation would also help ensure that shippers pay tolls that are more reflective of the actual distance that gas is transported, again meaning improved price signals and economic efficiency.

TransCanada submitted that the initial impact of eliminating toll zones would be to lower long-haul tolls to DDAs located west of the zone load centre, while long-haul tolls to DDAs east of the load centre would increase. These toll changes would be proportionate to the difference in distance between the DDA and zonal load centres.

As a practical matter, TransCanada also indicated that eliminating toll zones will require a new basis for balancing fees in the Mainline Tariff. Currently, balancing fees are based on the Eastern Zone toll. TransCanada proposed to instead use the FT toll from Empress to the KPUC EDA (Kingston, Ontario), as that distance of haul does not fluctuate and it closely matches the current Eastern Zone load centre.

Views of Intervenors

APPrO

APPrO supported the elimination of toll zones. APPrO submitted that this would be a more appropriate allocation of costs based on system usage, and would improve adherence to the cost-causation principle.

MAS

MAS opposed the proposed elimination of toll zones, which it contended would result in tolls that are unjust and unreasonable since the change would be an unjustified departure from the historic Mainline toll methodology.

In addition to specific submissions relating to eliminating toll zones, MAS also submitted that all of TransCanada's various proposed toll design changes are unwarranted. MAS indicated that the proposed toll design changes would reallocate rather than reduce costs, and hence would not solve the Mainline's fundamental issue. MAS stated that the current toll methodology has served the Mainline and toll payers well, and the facilities existing today are linked to the tolling principles that TransCanada is proposing to abandon. MAS contended that TransCanada has not met the burden of proof to demonstrate that the various proposed changes, and the elimination of zones specifically, would have a positive long-term impact, increase long-haul flows, and improve the Mainline's long-term sustainability.

MAS indicated that the reasons that TransCanada advanced in RH-3-82[36] in support of extending the Eastern Zone to Quebec City remain valid today. Specifically, MAS contended that there are still economic and geographic similarities between Montréal and Quebec City, the public interest is still best served by offering competitive prices on TQM, and the Eastern Zone is still a unified energy market. MAS further asserted that the major underlying reason for the existence of the Eastern Zone is that without it, shippers in Québec would be at a commercial disadvantage to shippers in Ontario. MAS also indicated that because Québec shippers have fewer supply alternatives than Ontario shippers, they are already at a commercial disadvantage. Concerning the recent shift to short-haul from long-haul service, MAS indicated that this is a demonstration that long-haul tolls are not sustainable, but it does not offset the necessity for zonal tolling.

MAS also summarized the Board's findings, and certain submissions, from various hearings that dealt with toll zones, the most recent cited case being RH-3-2004.[37] For example, MAS quoted from the first TransCanada rate case, RH-1-72,[38] where the Board rejected an intervenor's proposal to eliminate toll zones and stated, "[t]he most important consideration is that abandonment of zoning would be a drastic departure from the pattern on which this system was developed. It appears to the Board that such departure would have adverse effects much

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[36] National Energy Board, RH-3-82, Reasons for Decision, TransCanada PipeLines Limited, Tolls, July 1982.

[37] National Energy Board, RH-3-2004, Reasons for Decision, TransCanada PipeLines Limited, North Bay Junction Application, December 2004.

[38] National Energy Board, RH-1-72, Reasons for Decision, TransCanada PipeLines Limited, Tolls, May 1973.

outweighing the benefits which might ensue from the change." As another example, MAS quoted from RH-3-86,[39] where the Board indicated that the existing Eastern Zone dimensions had been "established in the light of past economic, political and investment decisions made to achieve objectives which at the time were developed in the public interest of the country."

MAS submitted that TransCanada had only indicated that eliminating zones would better align with the cost-based/user-pay principle, and not that keeping zones would be contrary to that or any other principles or regulatory requirements. MAS submitted that a tolling methodology that complies with those principles and requirements should not be abolished given the Board's conclusion in RH-1-72, quoted above.

MAS contended that TransCanada failed to support its conclusions that the proposal would improve economic efficiency and increase use of long-haul. MAS pointed out that TransCanada indicated only that eliminating zones may help prevent further conversion from long-haul to short-haul and may encourage a return to long-haul. MAS noted that TransCanada did not analyse the specific impact that toll zones have had, and pointed out that eliminating the zones will result in increased long-haul tolls on some paths. MAS also submitted that the data from the past 10 years did not support TransCanada's conclusion that zonal load centres were shifting eastward.

With respect to the problem of free-riding or segmentation of certain long-haul service, MAS asserted that targeted tariff changes could address the problem, although MAS did not indicate what those changes could be. MAS stated that eliminating toll zones would make Mainline tolling less predictable and more difficult to compare across time, and that tariff changes would be a more appropriate solution to this issue.

MAS also indicated that zone-based tolls are the standard for long-line pipelines, and that such aggregation is common for various energy utilities. This approach strikes the balance between precision, administrative tractability and transparency.

Gaz Métro

Gaz Métro argued that there is a variety of ways to effectively deal with the free-riding/segmentation problem, without eliminating zones. To demonstrate one way, Gaz Métro pointed to the success of the creation of a standalone Welwyn delivery point and a cap put on deliveries to the Centram SSDA.

Gaz Métro argued that TransCanada did not adequately analyze the impacts of eliminating zones, and thus failed to meet the required burden of proof. Among other points, Gaz Métro argued that TransCanada should have specifically analysed the impact of increased tolls for DDAs east of the load centre, recognizing that the free-riding/segmentation problem could be eliminated by other means.

Gaz Métro argued that toll zones ensure the relative competitiveness of the service for all customers located within the same zone, and that Canadian consumers have access to western

[39] National Energy Board, RH-3-86, Reasons for Decision, TransCanada PipeLines Limited, Tolls, May 1987.

natural gas at rates that reflect the similarity of markets within zones. Eliminating toll zones would produce tolls that are not just and reasonable and that are contrary to the public interest. Gaz Métro also argued that it would be unjustly discriminatory not to have a single toll applied to the whole Eastern Zone.

Tenaska

Tenaska indicated that it supported MAS' position opposing the elimination of zones.

TransGas

TransGas supported the elimination of toll zones, arguing that it would better reflect gas use within each DDA and better allocate costs.

Québec

Québec argued that the benefits of zonal tolling are not as great as in the past, noting that the Eastern Zone load centre has moved eastward and that Gaz Métro now relies on long-haul for less than one third of its supply. Nonetheless, noting that the existing method has been in place for over forty years and that the largest impact of eliminating zones would be solving the free-rider/segmentation problem, Québec opposed the elimination of zones since it argued that more modest changes, such as a cap on deliveries to certain locations, could solve the free-rider/segmentation problem.

TransCanada's Reply

TransCanada submitted that it is unreasonable to expect TransCanada to empirically demonstrate the benefits of eliminating zones. It is undeniable that toll zones mute the price signals as compared to tolls based on geographically smaller DDAs, and waiting for empirical evidence would mean that TransCanada could not act proactively. TransCanada indicated that the level of certainty desired by MAS regarding the impact of the proposal is not possible given that shippers' contracting decisions depend on numerous factors.

TransCanada acknowledged that the toll zone methodology is not contrary to the cost-based/user-pay principle. However, it is not necessary to show that an existing methodology would produce unjust and unreasonable tolls in order to justify a change. Rather, it is only necessary to show that a new methodology will result in just and reasonable tolls and that it would produce a better outcome, and changed circumstances can justify changes to historical practices. TransCanada indicated this has clearly been the Board's approach in other cases, and quoted Board comments in RH-4-2001 to that effect. TransCanada also indicated that current competitive circumstances justify the change, and submitted that the Board approved the creation of the Southwest Zone in RH-1-2002 specifically because of competitiveness concerns.

TransCanada indicated that MAS did not provide any specific tariff alterations that could address the free-riding from segmentation. TransCanada suggested that shippers are creative in finding ways to segment their long-haul service, and described how shippers got around the designation

of Welwyn as a standalone delivery point, which was meant to deal with this issue. TransCanada argued that there are no tariff changes that would solve the free-riding/segmentation problem, and addressing the problem at one location such as the Centram SSDA would only move the problem to another location. TransCanada also indicated that eliminating toll zones would lower tolls to even most of the DDAs located east of the zonal load centres, including the GMIT EDA, after accounting for the increased revenues from eliminating the free-rider segmentation problem.

TransCanada argued that, unlike when there were no competitive pressures or bypass risk, the Mainline and its shippers can no longer afford the cross-subsidies between DDAs within a zone such as the Eastern Zone.

Views of the Board

Whereas eliminating toll zones would have been a "drastic departure" at the time of RH-1-72, we find that today, the departure has effectively already happened, due to market forces which caused shippers to shift to short-haul service instead of zone-based long-haul service. The shift to short-haul service means that toll zones no longer ensure, to any significant degree, that shippers within a zone are paying the same tolls. Particularly in the Eastern Zone, tolls already vary significantly for a very large portion of volumes. As a result, we view today's prevalence of short-haul as an extremely significant change in the circumstances that supported the use of toll zones. For example, we give little weight to the idea that toll zones should persist on the basis that shippers in Québec would be at a commercial disadvantage without toll zones; Gaz Métro already sources a significant majority of its supply with short-haul, and Gaz Métro indicated that it plans to move completely away from long-haul in favour of short-haul.

We find that it is now appropriate to end the use of toll zones for domestic long-haul tolling, so as to remove the distinct tolling treatment for long-haul WCSB gas, versus all other eastern supply options, and to more accurately reflect actual distance of haul in domestic long-haul tolls.

In reaching this decision, we put no weight on the inconclusive evidence related to whether the incentive for DDAs west of the load centre to move to short-haul is causing load centres to shift east. We also put no weight on the issue of free-riding/segmentation. While eliminating toll zones has the benefit of eliminating this problem, we are of the view that there are strong principled reasons, as we have explained above, for eliminating toll zones given the current circumstances.

We accept TransCanada's rationale for calculating balancing fees on the basis of the FT toll from Empress to the KPUC EDA.

Decision

Toll zones shall be eliminated, and long-haul domestic tolls shall be calculated based on the distance of haul to DDA load centres as is done for short-haul domestic tolls.

The balancing fees, as contained and defined in the Mainline Tariff, shall be based on the FT toll from Empress to the KPUC EDA.

7.2 Changes to the Mainline Commodity Toll and Cost Allocation

To calculate its tolls, TransCanada classifies each cost of service item between the energy classification and the energy-distance classification. The energy component is usually based on the use of metering assets in providing the service, such that the cost is attributable equally to every GJ unit of gas (energy) regardless of how far that unit is shipped. The energy-distance component is usually based on the use of transmission assets, such that the cost is attributable equally to each GJ-km, to reflect that the cost should be paid in proportion to how far a unit of gas is shipped.

Currently, the energy component is recovered only in the fixed-demand part of the toll, which contracted shippers pay according to their full contracted quantities, even if they actually ship less than that amount. The energy-distance component is recovered in the fixed-demand and a variable part of the toll, known as the commodity toll because it is only paid for units of gas that are actually shipped. Most Mainline costs are recovered in demand charges; approximately two per cent of charges were recovered in variable charges in 2011.

FT tolls for each path on the Mainline can be generated once the firm transportation distances and volumes are determined and once the cost of service is functionally allocated among energy and energy-distance (fixed and variable). Changing the cost allocation methodology alters the relative share of the toll that is recovered in the energy component and energy-distance component. For example, increasing the relative share allocated to the energy component means that a toll becomes relatively more energy sensitive and less energy-distance sensitive, shorter distance tolls become more expensive and longer distance tolls become less expensive.

7.2.1 Elimination of the Commodity Toll

Views of TransCanada

As part of its proposed changes to cost allocation, TransCanada proposed to eliminate the commodity component of the FT toll. Currently, all electric costs and some TBO costs are recovered through the commodity component of the FT toll, representing approximately two per cent of the 2013 Status Quo revenue requirement. With the elimination of the commodity charge, all costs would be recovered in the demand component of the FT toll.

TransCanada submitted that the elimination of the commodity component of the toll would simplify cost allocation and the toll structure, and align the Mainline tolling with that of other NEB-regulated Group 1 natural gas pipelines, none of which have a commodity charge. TransCanada also stated that the elimination of the commodity charge would improve toll stability, and benefit the Mainline's long-term economic viability. This is because the contracted demand is easier to forecast than the actual usage of contracted capacity.

TransCanada also stated that because shippers make nomination decisions based on the cost of gas plus variable transportation charges and fuel, and other Group 1 gas companies have no commodity tolls, maintaining a commodity toll on the Mainline could adversely affect Mainline flows. This also affects the long-term economic viability of the Mainline.

TransCanada observed that the current commodity toll does not generate a correct relationship to costs that are actually incurred due to volumes actually shipped, and that a better relationship may be achieved by allocating variable charges into the demand component. TransCanada explained that the commodity charge, as currently applied to electric costs on the Mainline, does not capture a perfect relationship between the incurrence of variable costs and the recovery of variable costs. For example, the Mainline could have no throughput but would still be contractually required to pay some electric costs. Differences between forecast costs and throughput further detract from the accuracy of the relationship between variable cost incurrence and the commodity charge rate.

TransCanada acknowledged that recovering variable costs in demand charges might not be strictly consistent with the user-pay principle. However, the recovery of variable costs previously included in the commodity charge will continue to be cost-based. TransCanada observed that the elimination of the commodity toll will not impact shippers that utilize their contracted capacity at relatively higher load factors. For shippers with lower load factors, the toll difference will not be material.

Views of Intervenors

ANE proposed to maintain the commodity component of the toll. ANE stated that the costs currently recovered in the commodity toll are appropriately recovered in a user-pay, distance-based commodity toll. ANE observed that TransCanada's proposal to recover the variable costs related to electric-drive compression in fixed charges is inconsistent with its current practice to recover natural gas in-kind based on actual GJ-km volumes shipped.

ANE contended that eliminating the commodity toll would negatively impact the retention of FT loads. ANE suggested, rather than eliminating the variable charge, it could be more appropriate to increase the variable charge by incorporating some fixed costs in it.

MAS argued that TransCanada should maintain the commodity component of the toll. MAS acknowledged that the commodity toll collects only a small amount of the Mainline's revenue requirement, but indicated that there are conceptual and policy reasons to maintain a commodity toll. MAS explained the commodity toll allows costs that vary with throughput to be recovered in a cost-based way.

YEC opposed TransCanada's proposed elimination of the commodity component of the toll because it would be counter to the cost causation principle. YEC argued that the comparison to other Group 1 companies was not a relevant consideration. YEC stated that it expects to have a low load factor and, therefore, the elimination of the commodity toll would increase its effective toll.

Views of the Board

While eliminating the commodity component of the toll may slightly lessen adherence to the cost-based/user-pay principle, we find that this is not a significant practical concern given how small the commodity toll is. While there was disagreement about the impacts of eliminating the commodity charge, we find that it is appropriate to eliminate it in order

to provide the Mainline with the opportunity to benefit in the ways indicated by TransCanada. Specifically, these include modest toll stability benefits, potential for greater utilization rates by FT shippers, and tolling that is consistent with other Group 1 companies.

Decision

We approve the proposal to eliminate the commodity component of the toll.

7.2.2 Changes to Cost Allocation Methodology

Views of TransCanada

TransCanada proposed a number of changes to the allocation of the Mainline's cost of service items. The proposed cost allocation methodol that has the result of increasing the relative share of the cost of service allocated to the energy function relative to the energy-distance function.

TransCanada's current toll-making process uses at least eight different percentage allocation factors to assign the various cost of service items between fixed energy and fixed and variable energy-distance. TransCanada proposed to simplify the methodology such that cost of service items are divided into three categories, each with a single allocation factor:

1. operations-related costs would be allocated 50 per cent to energy, 50 per cent to energy-distance;
2. capital-related costs would be allocated based on the ratio of rate base that is attributed to transmission and metering; and
3. other costs and revenues would be allocated based on the overall Gross Revenue Requirement (GRR) ratio that results from the costs allocated using the above two allocation factors.

TransCanada observed that the proposed reduction to three allocation factors would contribute to a simpler toll design and a more transparent and stable toll making methodology.

TransCanada conducted an internal review of each cost item to determine an appropriate cost allocation methodology given the current use of the system. TransCanada did not conduct a formal cost allocation study. TransCanada stated that costs are generally classified based on the degree to which they are related to distance and that there is no generally accepted way in which costs are classified between energy and energy-distance; rather, the definition of which costs are distance-related, and to what degree, relies heavily upon judgment.

TransCanada proposed that the distribution of rate base assets between metering and transmission assets be used as a proxy for determining the allocation for capital-related costs between energy and energy-distance. TransCanada identified capital-related costs to include Return, Depreciation, Income Taxes, the LTAA, and Municipal and Provincial Capital Taxes.

For the 2013 Test Year, the rate base is distributed as approximately two per cent metering and 98 per cent transmission assets. Therefore, capital-related costs would be allocated approximately two per cent to energy costs, and 98 per cent to energy-distance.

TransCanada remarked that the proposal leaves the allocation for capital-related costs essentially unchanged from the Status Quo. For example, Income Taxes and Return are already allocated based on the Ratio of Rate Base, while Municipal Taxes, General Plant and the LTAA are currently allocated based on the Ratio of Gross Plant, which produces a similar value to the Ratio of Rate Base.[40] TransCanada suggested that relying on the Ratio of Rate Base is an appropriate cost allocation for capital-related costs because rate base represents the capital employed by TransCanada to provide Mainline service.

TransCanada proposed the common allocator of 50 per cent energy, 50 per cent energy-distance, for all operations-related costs. Operations-related costs were determined by TransCanada to include the following cost of service items: OM&A; TBO; Storage Operating Costs; Electric Costs and Tax on Fuel; Pipeline Integrity and Insurance Deductible Costs; Regulatory Proceeding and Collaborative Costs; and NEB Cost Recovery. These items currently employ a variety of allocators among fixed energy, fixed energy-distance, and variable energy-distance. For example, OM&A uses a variety of allocation methods, including 50 per cent fixed energy and 50 per cent fixed energy-distance for administrative expenses. TBO costs use a ratio of the demand and commodity tolls of TBO pipeline to fixed energy-distance and variable energy-distance, respectively. Compressor Repair and Overhaul Costs uses 100 per cent fixed energy-distance. Electric Costs and Tax on Fuel uses 100 per cent variable energy-distance. Storage Operating Costs, and Pipeline Integrity and Insurance Deductible Costs use 100 per cent fixed energy-distance. Regulatory Proceeding and Collaborative Costs, as well as NEB Cost Recovery, use 50 per cent fixed energy and 50 per cent fixed energy-distance.

TransCanada suggested at least a portion of the operations-related costs is not dependent on specific throughput, distance or energy levels, nor attributable to particular facilities. An equal allocation between energy and energy-distance ensures that all shippers, regardless of how far they ship, are responsible for a reasonable share of operations-related costs. TransCanada stated that the increasing use of the Mainline bi-directionally has reduced the importance of distance in determining how TBO costs are actually incurred. Other costs, such as pipeline integrity costs, have a cost component that is time dependent and not dependent on the throughput distance. TransCanada submitted that, as a whole, the costs included as operations-related cost category balance out to make it reasonable to use a common allocator of 50 per cent energy, 50 per cent energy distance. The proposal for allocating operations-related costs results in the largest relative change in costs recovered from the energy and energy-distance component of the toll, relative to the current methodology.

TransCanada proposed all other costs and revenues not deemed to be capital or operational costs, which are Regulatory Amortization, Short-Term Adjustment Account (STAA), and

[40] The current allocation of other cost of service items classified as capital-related are: provincial capital taxes at 100 per cent fixed energy-distance; metering depreciation at 100 per cent to fixed energy; and remaining facility depreciation at 100 per cent to fixed energy-distance.

Miscellaneous Revenues, be allocated based on the overall GRR percentage allocation to energy and energy-distance that is a weighted-average of the capital-related cost allocation and the operations-related cost allocation. The resulting allocation based on the GRR would vary each year depending on the magnitude of each capital and operations-related component of the revenue requirement. Currently, Regulatory Amortizations are allocated 100 per cent to fixed energy-distance, and Miscellaneous Revenues are allocated mostly based on the GRR. The STAA is a new account and does not have a current allocation method.

TransCanada's proposed cost allocation would result in tolls that are relatively more energy-sensitive than the current cost allocation. However, distance would continue to be a primary factor in the cost classification on the Mainline. TransCanada stated that the proposed cost allocation change would continue to reasonably reflect the variation in the cost of providing service due to distance.

TransCanada submitted that for the 2013 Test Year, the proposed cost allocation would allocate approximately 15 per cent of costs to the energy component and approximately 85 per cent to the energy-distance component.[41] Should the Status Quo cost allocation be maintained for the 2013 test year, the cost allocation would be approximately five per cent of costs to the fixed energy component, 92 per cent of costs to the fixed energy-distance component and three per cent to the variable energy-distance component. The reallocation between energy and energy-distance would result in a reduction in the toll for paths greater than approximately 520 km, and an increase in the tolls for paths shorter than 520 km. For example, using Status Quo tolls as the starting point, for the NIT to Union SWDA, the isolated toll impact of the cost allocation changes is a decrease of $0.37/GJ in 2013; for the Parkway to Enbridge CDA, the isolated toll impact is an increase of $0.08/GJ in 2013.

TransCanada emphasized that the objective of the proposed changes to cost allocation was not to reduce tolls for long-haul paths. The objective was for the cost allocation to better reflect the cost of providing long-haul service. TransCanada suggested that long-haul shippers are paying more than their fair share of the costs of the system under the current cost allocation methodology.

TransCanada provided examples from six recent rate case proceedings from major U.S. inter-state pipelines in which the allocation of fixed costs that are non-distance related ranged from 17 per cent to 29 per cent. TransCanada stated that these examples provide a check on the reasonableness of the overall outcome of TransCanada's proposed cost allocation, as none had an overall allocation to the energy component that was lower than TransCanada's proposed allocation.

TransCanada explained the current Mainline cost allocation methodology was developed at a time when most Mainline transportation was long-haul FT contracts and service was relatively homogeneous. TransCanada submitted that a mostly homogenous group of shippers makes the cost allocation methodology relatively less important because, as the distances shipped are mostly the same, the tolls charged are mostly the same regardless of the allocation method. In an

[41] The overall GRR functionalization of 15 per cent to energy and 85 per cent to energy-distance does not include the TQM TBO cost or any other adjustments from the Restructuring Proposal.

environment with common shipper characteristics, there are reduced potential effects of cross-subsidization and muted price signals sent by a given cost allocation methodology.

The Mainline has lost this homogeneity; there is now a diversity of shippers and a diversity of services used, including significant short-haul usage. In addition, changes including supplies coming onto the Mainline in the market area (mostly the Eastern Triangle) and bi-directional flows, have meant that the link between cost causation and cost responsibility have become blurred if not lost. As a result, there is a need to update the Mainline's cost allocation methodology to more accurately allocate costs and send more precise price signals.

In response to an information request, TransCanada presented a quantitative analysis using simplifying assumptions, of the costs and revenues associated with the Prairies, NOL and Eastern Triangle segments. This analysis indicated that for the 2012 Test Year, assuming the implementation of the RP as a whole, the Eastern Triangle segment of the Mainline would contribute 23 per cent less revenues than costs. Without the proposed cost allocation changes, the Eastern Triangle revenues would be 30 per cent below its costs. As part of the analysis, TransCanada also provided a scenario assuming the ASE and depreciation components of the RP were not adopted. In this scenario, with implementation of the proposed cost allocation changes, the Eastern Triangle would generate approximately three per cent more revenues than costs; without the cost allocation changes, the Eastern Triangle would generate approximately eight per cent less revenues than costs. TransCanada did not estimate the impact of removing the TQM TBO proposal, but indicated that in its analysis, the TQM TBO costs and the revenues from the TQM charge were accounted for in the Eastern Triangle.

TransCanada affirmed the Mainline continues to be an integrated system for the purposes of calculating the revenue requirement and determining cost allocation. For this reason, TransCanada maintained it is not necessarily ideal for an integrated system to result in a segment's revenues recovering that segment's embedded costs. However, TransCanada indicated that the segmented analysis shows that the proposed cost allocation changes are a step in the right direction, and provides a check on the reasonableness of TransCanada's proposed changes relative to the Status Quo. TransCanada also suggested that changing flow patterns and new supply basins have made it difficult to link cost causation and cost responsibility in a cost allocation study.

TransCanada stated the current business environment requires it to fully examine possible changes, including changes to cost allocation, to maintain the Mainline's competitiveness. TransCanada observed that the costs associated with the uncontracted firm capacity on the Mainline are spread across the Mainline using the cost allocation methodology. TransCanada stated that the costs associated with uncontracted firm capacity could not be isolated and assigned to specific shippers. TransCanada advanced that the under-subscription on existing facilities is a collective shared responsibility for all shippers.

Overall, TransCanada stated that its proposal would result in tolls that continue to be consistent with the Board's cost-based/user-pay principle because tolls would continue to be cost-based, and distance sensitivity would continue to be reflected in tolls such that cost responsibility follows cost causation. TransCanada also indicated the cost allocation changes would improve the Mainline's position in long-haul markets, send more accurate price signals, and support the long-term viability of the Mainline.

Views of Intervenors

APPrO

APPrO opposed TransCanada's proposed cost allocation methodology and the resulting shift in costs from long haul to short-haul. APPrO suggested that the extent of the proposed shift from energy-distance to energy is not warranted or supported by cost incurrence principles. APPrO suggested that the goal of a simpler cost allocation methodology to administer tolls must not take precedence over the requirement that tolls reflect cost causation.

APPrO submitted that the U.S. pipelines that TransCanada used as a check on the reasonableness of its overall cost allocation are not a comparative sample because they are different in significant respects from the Mainline.

CAPP

CAPP argued TransCanada's segmented cost analysis showed that users of the eastern section of the Mainline do not pay the full costs of the facilities that are used to provide them service. CAPP argued that long-haul western Canada flows should not subsidize eastern short-haul tolls, and that TransCanada's segmented analysis clearly shows this cross-subsidy. CAPP suggested that the Mainline's integrated system-wide cost allocation should be monitored closely for this cross-subsidy, and that the system-wide approach to cost allocation should be reviewed if TransCanada's expected increase in long-haul flows does not materialize.

IGUA

IGUA suggested TransCanada's restructuring proposal should address volume and capacity and cost structure before addressing cost allocation. IGUA noted that, while cost allocation can be used as a tool to make services more competitive in the marketplace, the overall level of costs on the Mainline can limit the ability to use cost allocation as a tool. IGUA agreed with TransCanada that cost allocation is not an exact science and that judgment is a required element.

ANE

ANE agreed with TransCanada that the changing nature of the Mainline might support a move away from distance allocation for certain costs. However, ANE disagreed with some of the areas where TransCanada proposes to be less determined by energy-distance. ANE stated that a reasoned application of toll design principles does not support some of TransCanada's proposed changes. ANE proposed an alternative cost allocation that results in an overall allocation in 2013 of eight per cent to energy, and 92 per cent allocated to energy-distance.[42]

ANE suggested that TransCanada relied on the objective of toll simplicity to justify some of the cost allocation changes, and that some of the changes are inconsistent with cost causation principles and inadequately supported by factual evidence. ANE explained that it is not

[42] Note that the energy-distance component includes the maintenance of the commodity toll. The distribution is approximately 8 per cent fixed energy, 90 per cent fixed energy-distance, and 2 per cent variable energy-distance.

necessarily appropriate to aggregate costs into cost categories, such as operational or capital costs. ANE stated that costs with a common allocator must have a common cost driver, which is not the case for all of the costs that TransCanada included in the operations-related category.

ANE opposed TransCanada's proposal to reallocate the TBO expense, Pipeline Integrity and Insurance Deductible Costs, Storage Operating Costs, and Electric Costs and Tax on Fuel to a common allocator of 50 per cent energy and 50 per cent energy-distance. ANE indicated that these changes are inconsistent with how the costs are incurred.

ANE submitted that TransCanada incurs TBO expense in lieu of rate base and other expense-related revenue requirements. As a result, the appropriate method for classifying TBO costs between energy and energy-distance is a composite of the overall allocation of costs on the Mainline, that is, the GRR. ANE also submitted that the vast majority of the pipeline integrity costs[43] are associated with costs driven by TransCanada's investment in transmission facilities, which are classified 100 per cent to the energy-distance component. For Storage Operating Costs, ANE indicated that they should be allocated based on the usage of storage facilities on the Mainline, which should be considered to be distance-related, consistent with other costs, including those related to line pack and compression, that provide a similar service to the Mainline. ANE also stated that the electric costs vary with the level of compression on the system, and that compression facilities are transmission-related. As electric costs are currently recovered in a variable energy-distance charge, should the variable component of the toll be eliminated, ANE proposed that electric costs should be recovered in the fixed charge only on an energy-distance basis. ANE suggested that this is important to be consistent with the approach to costs associated with gas in-kind for gas turbine compressors. ANE also proposed to classify the LTAA based on GRR, rather than rate base, because it is not associated with any particular line item.

ANE suggested the improper allocation in costs between energy and energy-distance can result in cross-subsidization between short-haul and long-haul shippers, which would violate the user-pay principle. ANE pointed out that a change in the usage of the system is a consideration in the allocation of costs, but does not necessarily drive the change in cost allocation methodology.

ANE suggested that although judgment is an appropriate element of a cost allocation study, given the level of costs on the Mainline and the objective of arriving at tolls which are cost-based user-pay, TransCanada should have done a cost allocation study.

Centra

Centra indicated that it conceptually supports TransCanada's proposed cost allocation changes, in order to more fairly allocate costs between short-haul and long-haul shippers.

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[43] ANE defined these costs as: monitoring the cathodic protection and mitigating concerns along the pipeline; corrosion prevention including inline inspections and corrosion repairs along the pipeline; and stress corrosion cracking management including hydrotesting inline inspections and excavation programs along the length of the pipeline.

MAS

MAS proposed that TransCanada maintain the current cost allocation methodology. MAS submitted that TransCanada's proposed cost allocation methodology does not address the fundamental issue of excess capacity on the Mainline and the associated costs passed on to shippers as a result of this excess capacity. MAS suggested that the toll methodology, including cost allocation between energy and energy-distance and the elimination of the commodity charge, is not the cause of TransCanada's competitiveness concerns; rather the concerns are with the Mainline's cost structure. The reallocation of more costs to the energy component of the toll would cause an inappropriate leakage of costs from long-haul paths to short-haul paths and impede the competitiveness of the Eastern Triangle. MAS stressed that ensuring competitiveness of short-haul transportation paths is essential, and TransCanada's proposed changes to toll design, including cost allocation, are inconsistent with that objective.

MAS indicated that TransCanada did not provide a compelling case in the form of empirical or operational evidence to support changes to its current toll design methodology. MAS observed that cost classification and cost allocation necessarily requires some judgment but that cost responsibility must be assigned to each shipper as closely as an exact accounting might permit. MAS suggested that TransCanada deviated from accepted ratemaking principles in the reallocation between energy and energy-distance and that the proposal is an extensive change to the currently accepted methodology of allocating costs. MAS suggested that TransCanada's proposal significantly blurs the historical and accepted relationship that exists between cost causation and cost responsibility.

Union

Union suggested that a cost allocation study was required to support a change to the cost allocation methodology.

Union argued that the shift to the energy component of the toll, which increases short-haul tolls and decreases long-haul tolls, results in a subsidy of the purchase of gas from the WCSB, all else being equal. Eastern short-haul service did not require the construction of long-haul facilities, but would now have to pay for the costs of underutilization and excess capacity associated with those facilities. Union suggested that TransCanada's proposal is similar to market-based tolls, as it shifts costs to captive eastern short-haul shippers who can afford to pay them.

TransGas

TransGas was concerned that the proposed cost allocation changes inappropriately increase the transportation costs for short-haul services, which could lead to short-haul shippers bypassing the Mainline.

YEC

YEC opposed TransCanada's proposed changes to cost allocation. YEC argued TransCanada's proposal would significantly shift distance-related costs to the energy component of the toll, and

cause a sharp increase in short-haul tolls. YEC expressed concern that reducing the energy-distance component of some costs, such as TBO costs, burdens short-haul shippers who do not consume the underlying service.

Ontario

Ontario opposed TransCanada's proposed cost allocation changes and stated that it would have the result of producing tolls that are less distance-sensitive than the Status Quo.

Québec

Québec supported the general principle of TransCanada's cost allocation proposal to allocate a larger portion of costs to the energy function.

TransCanada's Reply

TransCanada suggested its current cost allocation methodology is within the range of reasonable cost allocation methodologies, as is ANE's cost allocation proposal. However, TransCanada maintained that its proposal is the most efficient and sends the most accurate price signals.

TransCanada addressed specific aspects of the proposed cost allocation methodology rejected by ANE. For example, TransCanada indicated electricity costs are not exclusively distance sensitive because different transportation paths of identical distance could incur either zero electricity costs or $7,000 per day of electricity costs. With respect to TBO costs, TransCanada provided an example showing that, with the current system configuration, paths of substantially different distance can use the same amount of TBO, thus, suggesting distance should not be the primary cost allocator. TransCanada agreed that ANE's proposed allocation of the LTAA to GRR is within a wide range of reasonable potential approaches but noted that TransCanada considered the LTAA an investment in rate base.

TransCanada submitted that intervenors who maintain the current allocation in their proposal, including MAS, do not recognize that the allocation methodology was developed many years ago in a very different commercial and operational environment. TransCanada suggested that current cost allocation methodology cannot be presumed to be reasonable in today's completely different environment. With respect to MAS' concerns about the impact on the competitiveness of the Eastern Triangle, TransCanada pointed out the implementation of the Restructuring Proposal as a whole would result in lower tolls for most short-haul paths.

In response to intervenors' suggestions that TransCanada should have supported its proposed changes with a cost allocation study, TransCanada argued that such a study is a time-consuming and costly exercise that could result in a range of results. TransCanada suggested this range of results would not be more reliable than the outcome of TransCanada's internal review. TransCanada indicated the changing flow patterns on the Mainline have caused the link between cost causation and cost responsibility for specific cost of service items to become grey, if not lost.

Views of the Board

With the significant change in the usage of the Mainline in recent years, we find that undue weight should not be placed on the existing cost allocation methodology. While existing practices should be given some deference, they should be considered in the context of changed circumstances. As circumstances change or as experience is gained, the most appropriate toll design, including cost allocation, may correspondingly change.

Concerning TransCanada's evidence related to the cost allocations employed in the U.S., we recognize that the Mainline is different from the pipelines in those cases. Nonetheless, the evidence strongly suggests that the Mainline's existing cost allocation methodology is not aligned with other major interstate North American pipelines, and that the proposed changes would move the Mainline's methodology closer to those other pipelines. Even with the proposed changes, the evidence suggests that the Mainline would remain at the bottom end of the range of the percentage of costs the major interstate pipelines allocate to the energy component of tolls.

Similarly, we recognize that TransCanada's analysis of the Mainline's segmented costs and revenues employed assumptions in attributing the Mainline's system-wide integrated costs and revenues to the individual segments. Even though assumptions were required, we find that this analysis is informative and useful. TransCanada's analysis suggests that, with our rejection of TransCanada's ASE and depreciation proposals, the proposed cost allocation methodology would result in the throughput moved on the Eastern Triangle contributing revenues that are closer to the costs associated with that segment.[44] Without the cost allocation changes, TransCanada's analysis suggests Eastern Triangle throughput would contribute revenues that are approximately eight per cent lower than the segment's contribution to costs (again, this accounts for our rejection of the ASE and depreciation proposals, but not our rejection of the TQM proposal). This estimated gap of eight per cent would have to be made up by throughput on the other two segments.

While we agree with TransCanada that with the integrated toll design on the Mainline, it is not necessarily ideal for a segment's revenues to recover that segment's embedded costs, we also agree that the results of this analysis provide a check on the reasonableness of the proposed cost allocation methodology. In the current context where the Eastern Triangle is the healthiest segment of the Mainline, we find that it is reasonable for the cost allocation methodology to result in throughput on the Eastern Triangle contributing revenues that approximate its costs. Accordingly, we consider that TransCanada's analysis of the Mainline's segmented cots and revenues lends support to the appropriateness of the proposed cost allocation methodology.

We recognize that cost allocation studies are usually provided to support changes in how costs are allocated; however, there is no requirement that they be provided. Even when a study is provided, significant judgment is required to determine how best to allocate costs. Given how significantly system usage has evolved in recent years, and that usage is

[44] We note that our rejection of the proposed treatment of TQM TBO costs would, directionally, lower the revenues associated with Eastern Triangle throughput as compared to the analysis summarized under the Views of TransCanada.

likely to further change as TransCanada and Mainline stakeholders adjust to this Decision and as the structural adjustments in the North American pipeline grid continue, we are not persuaded that a cost allocation study would have provided material assistance in this case.

Based on the above considerations, we find that TransCanada's proposed cost allocation methodology results in a reasonable allocation of Mainline costs, and is appropriate. We have decided not to adjust any of the proposed line-by-line cost allocations, having found that none of the line-by-line proposals, grouped into three cost allocation categories, were unacceptable.

Decision

We approve TransCanada's proposed cost allocation methodology.

7.3 Treatment of TQM TBO Costs

The TQM Pipeline facilities are located in Québec and extend from a point of interconnection with the TransCanada Mainline at Saint-Lazare to a point near Quebec City in the Municipality of Lévis on the south shore of the St. Lawrence River. The TQM facilities also extend from Terrebonne, north of Montréal, to East Hereford on the New Hampshire border, where it interconnects with the Portland Natural Gas Transmission System. Since TQM began operating in the early 1980s, TransCanada has contracted for all of TQM's firm capacity and has used this capacity to provide integrated Mainline services. Accordingly, TransCanada pays for nearly all of TQM's revenue requirement, and the Mainline includes these costs in its own revenue requirement as a TBO cost.

Views of TransCanada

Traditionally, all of the TQM TBO costs have been embedded within the Mainline's system-wide revenue requirement and recovered through all Mainline tolls. As part of the Restructuring Proposal, TransCanada proposed to instead allocate the TQM TBO costs only to any transportation that originates from, or is delivered to, locations on TQM. Integrated Mainline service to and from points physically located on TQM would continue.

More specifically, TransCanada proposed to set tolls to and from points on TQM as the Mainline system average costs for transportation on the Mainline up to Les Cèdres (where the Mainline and TQM interconnect), plus a TQM charge.[45] The TQM charge would be a postage-rate toll, such that it would apply equally to each unit of gas transported on TQM regardless of the distance travelled. The TQM charge would be set to reflect known or forecast net TQM TBO costs (that is, net of the East Hereford delivery pressure costs) and a forecast of firm billing determinants and discretionary revenues for services that use TQM. Variances between these actual and forecast revenues and costs would be reflected in the TQM charge in subsequent

[45] TransCanada referred to the interconnect of the Mainline and TQM as Saint-Lazare or Les Cèdres. Les Cèdres is the point listed in the Mainline tariff.

years. The resulting 2012 TQM charge would be $0.336/GJ, based on net TQM TBO costs of $75.0 million.

To implement this proposal, TransCanada proposed to split the existing GMIT EDA into two delivery areas, which would require splitting some existing contracts. The portion of the existing GMIT EDA located on TransCanada facilities would form the new GMIT EDA, and the remainder, located on TQM, would form the new GMIT TQM EDA. The TQM charge would apply to volumes touching the GMIT TQM EDA. Based on 2010 metered quantities, approximately two-thirds of deliveries to the existing GMIT EDA would be in the new GMIT TQM EDA and therefore pay the TQM charge; the TQM charge would also apply to East Hereford deliveries and any receipts onto TQM.

In isolation, the TQM charge would lower tolls for all Mainline services other than those using TQM. TransCanada showed that for these non-TQM services, the 2012 isolated toll reduction, measured from the Status Quo tolls, would be approximately three per cent on average, or between $0.01 to $0.12/GJ (2 to 5 per cent) depending on the path. If measured from the RP tolls, denying the TQM proposal would increase 2012 tolls for non-TQM services by approximately $0.01 to $0.03/GJ (2 to 15 per cent). For services using TQM, the paths that TransCanada showed indicated that the proposal would increase 2012 tolls by approximately $0.01 to $0.37GJ (0 to 118 per cent) if measured from the Status Quo tolls. If measured from Restructuring Proposal tolls, denying the TQM proposal would reduce 2012 tolls for these services by approximately $0.17 to $0.27/GJ (14 to 42 per cent). TransCanada contended that rather than just looking at these isolated impacts for services using TQM, the TQM proposal should be considered in the context of the whole Restructuring Proposal, which would leave most TQM area tolls lower or similar to those under the Status Quo.

TransCanada acknowledged that in RH-3-86 the Board specifically rejected intervenor proposals to recover TQM TBO costs solely from those shippers utilizing TQM. However, TransCanada submitted that its proposal is appropriate given today's circumstances and outlook.

When the rolled-in treatment of TQM TBO costs was initially implemented, virtually all throughput to Québec flowed long-haul from Empress, Alberta. However, since 1999, contract demand to the GMIT EDA and to East Hereford has significantly shifted from long-haul to short-haul, from approximately 24 per cent short haul in 1999 to approximately 70 per cent short-haul in 2011. As a result, deliveries to TQM are now using less of the Mainline, and hence contributing fewer billing determinants. According to TransCanada, only approximately 40 per cent of the TQM TBO costs are currently recovered from the shippers that directly use TQM, and this amount is decreasing over time.

TransCanada also submitted that in the past the Mainline did not face the same toll pressures and competitive threats as it does today. TransCanada indicated that the proposal would improve cost accountability and better reflect the user-pay/cost-causation principle, which would also improve price signals for Mainline capacity, consistent with the Board's economic efficiency principle. TransCanada further stated that eliminating cross-subsidies could reduce the potential for bypass of the Mainline. More accurate or economically efficient price signals could help the Mainline compete in the market now that short-haul transportation is prevalent and that there is potential for increased short-haul activity due to Marcellus production.

With specific reference to the most recent proceeding where TransCanada actively defended the rolled-in treatment of TQM TBO costs, the RH-1-2007 Gros Cacouna hearing,[46] TransCanada spoke of the fundamentally different expectations at that time. Notably, in RH-1-2007, new LNG import facilities that would connect to TQM were expected, which would provide new supply for TQM and the Mainline. The result would have been multi-functional and bi-directional use of TQM. Today, no such facilities are expected and the TQM TBO is expected to continue as an eastern delivery extension of the Mainline that is used by a small subset of Mainline shippers. TransCanada indicated that the current potential for Utica shale production in Québec, with production in its infancy and subject to a drilling moratorium, does not warrant continued rolled-in treatment of TQM. TransCanada stated that the integrated tolling of TQM could be re-examined if at some point in the future a substantial amount of Québec production, in the order of 1 Bcf/d (28.3 $10^6 m^3/d$), were to feed the Mainline. However, TransCanada does not expect that to ever occur.

With respect to proposing different treatment for the TQM TBO as compared to the GLGT and Union TBOs, TransCanada submitted that the TQM TBO capacity is unique. The GLGT and Union TBOs are required to provide a significant portion of the Mainline's service to diverse markets, and functionally represent operational loops of the Mainline. The TQM TBO, by contrast, is utilized solely to provide service to and from points within the geographical footprint of TQM at the eastern-most end of the Mainline, and users of TQM are clearly identifiable. TransCanada also noted other distinguishing features, such as the bi-directional commercial use of the GLGT and Union TBOs.

TransCanada concluded that these factors, notably the changed contracting patterns, the current business environment, and the fact that only select locations and shippers utilize the TQM TBO capacity, mean that it is no longer appropriate to roll-in the TQM TBO costs across the whole Mainline.

Views of Intervenors

APPrO

As discussed in Section 11.2, APPrO proposes surcharges to allocate TBO costs directly to the shippers using a given TBO's capacity. Accordingly, APPrO supported TransCanada's proposed TQM charge.

IGUA

IGUA submitted that the proposed TQM charge is punitive, and introduces very significant new costs to a relatively small number of captive users of the Mainline without bringing any new benefits to justify this. IGUA also stated that TQM and the Mainline remain integrated, and Québec Utica shale could increase the operational integration between TQM and the Mainline. However, IGUA acknowledged during the latter part of the hearing that commercial Québec Utica production in the next five years was unlikely.

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[46] National Energy Board, RH-1-2007, Reasons for Decision, TransCanada PipeLines Limited, Gros Couna Receipt Point Application, July 2007.

ANE

ANE opposed TransCanada's TQM proposal. ANE indicated that the TQM TBO is no different than the GLGT and Union TBOs in that they all allow TransCanada to provide service to areas that would have otherwise required new facilities construction. In addition, the integrated Mainline service to points off TQM provide revenue benefits to the Mainline. ANE also argued that significant long-haul WCSB volumes get delivered to Dawn, so even with Gaz Métro's shift to short-haul service, it cannot be said that long-haul gas is no longer serving the Québec market.

ANE submitted that it would be discriminatory for TQM to be the only part of the integrated Mainline to be tolled in a distinct way, based on location, and argued this change would represent an unjustified departure from a long-held consistent regulatory approach.

MAS

MAS opposed TransCanada's TQM proposal, indicating that it would be counter to section 62 of the NEB Act. MAS submitted that the proposal would result in tolls that are not just and reasonable and that are discriminatory. MAS also indicated that the TQM charge would result in different tolls being charged in the greater Montréal area market, "under substantially similar circumstances and conditions, for traffic of the same description carried over the same route under substantially similar circumstances and conditions."[47] The Island of Montréal, which represents approximately one third of Gaz Métro's market, is currently supplied by two meter stations located on TQM-owned facilities and one meter station on TransCanada-owned facilities. A fourth meter station is also located on TransCanada-owned facilities and will again supply the Island of Montréal after required maintenance and remedial work is completed.

Accordingly, MAS contented that TransCanada's proposal would mean gas serving the Island of Montréal would be tolled at significantly different rates depending on which meter station the gas arrived through. For example, if delivered from Dawn, the toll would be approximately $0.31/GJ (72 per cent) higher if it arrived through the Boisbriand station rather than the Saint-Mathieu station, even though Boisbriand is 9 km closer to the interconnect between TQM and the Mainline. MAS further indicated that it views the greater Montréal area as one market, and so the proposal would also see north-shore and south-shore gas-consuming businesses paying different tolls while competing directly with one another. The result would be counter to the ratemaking principle of law of one price, which had been cited by one of TransCanada's witnesses.

MAS indicated that for ratemaking and contracting purposes TQM has always been considered an integral part of the Mainline. MAS quoted from TransCanada's defense of integrated tolling of TQM in the RH-1-2007 proceeding, and suggested that TransCanada was now putting aside the historical arguments used to justify the rolled-in treatment of TQM TBO costs. MAS also pointed out that TransCanada continues to manage TQM operations, as it has done since 2003, and TransCanada operates and coordinates the two systems to meet total system requirements on a least-cost basis as though they were one system. MAS concluded that the historical rationale for integrated tolling is still warranted by the current facts and circumstances.

[47] This language mirrors that in section 62 of the NEB Act.

MAS challenged the suggestion that the shift towards short-haul contracting for service to TQM justifies a move to tolling based on a strict application of the cost-causation/user-pay principle. MAS indicated that adopting this philosophy should also mean that any short-haul paths in the East should not include any costs for facilities in either the Prairies or NOL segments. Taken a step further, this would suggest that the costs associated with facilities that are no longer used should not be recovered from any shippers since it would be counter to the user- pay principle when applied at the facilities level. MAS stated that the inconsistency in TransCanada's approach for other parts of its integrated system is a clear indication of a discriminatory approach in applying ratemaking principles.

MAS also pointed to the Board's RH-1-72 Decision as providing a clear description of the historical rationale for integrated tolling across the Mainline. MAS summarized the historical rationale as being that in an integrated system, since all customers share the benefits derived from the system's facilities, they all ought to share the costs of those facilities. Part of this arises from the recognition that the economies of scale achieved in upstream segments of a system would not be possible without the downstream segments. MAS indicated that every pipeline has a terminal zone like TQM, and concluded that TransCanada's TQM proposal undermines the principles underlining integrated tolling.

With respect to the proposed splitting of the GMIT EDA into two delivery areas, MAS raised concerns related to how this would impact Gaz Métro's ability to balance its loads (that is, limit its withdrawals from the integrated Mainline system to its nominated quantities, within certain tolerance levels). MAS indicated that splitting the GMIT EDA into two would mean that Gaz Métro would have to load balance these two distinct zones on a stand-alone basis. MAS indicated that Gaz Métro's in-franchise load balancing tools are all totally (in the case of its two underground storage sites) or partially (in the case of its LNG plant) located in the proposed GMIT TQM EDA. Accordingly, MAS indicated that the split of the current GMIT EDA would deprive Gaz Métro of the assets it requires to meet its Mainline tariff obligations.

Gaz Métro

In response to TransCanada's submissions that the Mainline is cross-subsidizing TQM shippers, Gaz Métro argued that this has been the case since the inception of TQM and that all Mainline TBOs are associated with some cross-subsidization. Further, Gaz Métro argued that shippers using TQM now are actually paying a greater share of TQM costs than at the time of RH-3-86, when TransCanada supported, and the Board upheld, the rolled-in treatment of the TQM TBO cost. Whereas TransCanada's evidence in this proceeding suggested that shippers using TQM were paying only approximately 40 per cent of the costs of the TQM TBO, Gaz Métro pointed to the RH-3-86 proceeding where intervenors had submitted that the corresponding number at that time was 20 per cent. Gaz Métro also argued that the alternative put forward by TransCanada, described below, that would apply a surcharge to the existing GMIT EDA rather than splitting the GMIT EDA in two, would also be unjustly discriminatory.

Tenaska

Tenaska opposed TransCanada's TQM TBO proposal. Tenaska argued that TQM was conceived and built as a simple extension of the Mainline, and that the existing tolling treatment reflects that, by tolling TQM just as other Mainline facilities are tolled. Tenaska argued that the tolling approach should be consistent across the system, such that if segmented tolling is not used on the rest of the system it should not be used for TQM. Tenaska also suggested that the high per-unit cost on TQM is likely because the TQM extension that goes to the East Hereford export point is very underutilized. Tenaska argued that it is not fair to make Gaz Métro's customers pay for that line by themselves.

Ontario

Ontario supported TransCanada's TQM TBO proposal. Ontario pointed to the shift towards short-haul contracting for deliveries to eastern markets and to TQM having the highest degree of cross-subsidization on the Mainline, and argued that the proposal would improve alignment of TQM costs being charged to those that utilize TQM.

Québec

Québec strongly opposed TransCanada's TQM TBO proposal, pointing to the consistent historical treatment of the TQM system, and the historic and continued integrated nature and identical service offerings of TQM and the rest of the Mainline. Québec took issue with the premise that very small toll decreases for non-TQM Mainline services would help the viability of the Mainline, while toll increases in excess of $0.30/GJ for TQM services were acceptable. Québec argued that this was essentially the reverse of what TransCanada was proposing for delivery pressure tolls at East Hereford.

TransCanada's Reply

TransCanada acknowledged that there is a degree of operational integration between the Mainline and TQM, indicating that the Mainline and TQM are designed and operated on an integrated basis. However, unlike with the GLGT and Union TBOs, shippers that use the TQM TBO service are clearly identifiable, sufficiently distinct, and create costs that are also clearly identifiable and distinct from other Mainline shippers. As well, the TQM TBO provides for an extension of the Mainline rather than an operational loop.

TransCanada indicated that MAS failed to acknowledge the changed circumstances on the Mainline as a whole, and with respect to the volumes served by TQM specifically. TransCanada suggested that the cross-subsidy of the TQM TBO was not as significant a problem in the past when the Mainline faced less competitive pressures and had lower tolls, and the majority of gas travelled long-haul.

TransCanada also disagreed that the proposal would be counter to the requirement in section 62 of the NEB Act that "[a]ll tolls [...] shall always, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be

charged equally to all persons at the same rate." TransCanada submitted that given that tolls would differ based on where the gas was delivered, and specifically whether they used TQM, the proposal would create different rates for "traffic of similar description but which is carried over different routes", wording the Board used in RH-4-86.

With respect to tolls to various points in the Montréal area differing by approximately $0.314/GJ, TransCanada submitted that it is just discrimination, on account of it being reflective of cost causation. Nonetheless, TransCanada suggested that there are two ways to easily remedy this. One is for Gaz Métro to pool its own costs related to service on the integrated Mainline, and to allocate those costs to its customers as Gaz Métro deems appropriate. Gaz Métro could then eliminate the Mainline toll differences in the rates charged to Gaz Métro customers. The second alternative would be for the existing GMIT EDA to stay intact, and for a surcharge to apply to all volumes within that larger DDA (except for deliveries to Napierville and Philipsburg). TransCanada indicated that this was an acceptable approach and one it was willing to accept if the Board was significantly concerned about the issue of discrimination. As compared to TransCanada's proposal, this would be administratively simpler, partly because it would only require one balancing agreement. It would also eliminate the concern related to potential discrimination. However, TransCanada still proposed splitting the GMIT EDA as it more closely aligned with the cost causation/user-pay principle.

Views of the Board

As described by TransCanada and intervenors, TQM has always been considered part of the integrated Mainline system, and the Mainline and TQM continue to be integrated from an operational and service perspective. The long-standing integrated approach has meant that since TQM went into service, TQM has been the eastern-most part of the integrated Mainline. As indicated by MAS, a transmission pipeline generally or always has a terminal zone, and the integrated approach to tolling and cost distribution is partly based on the recognition that downstream facilities help give rise to economies of scale for upstream facilities.

While circumstances might eventually warrant moving to segmented tolling across the Mainline, and during the proceeding there was some high-level discussion of this future possibility, we are reluctant to do so for just the eastern-most piece of the integrated Mainline. While we find that the shift from long-haul to short-haul service is a significant change, we note that this shift is far from unique to volumes that use TQM. Rather, this trend has occurred fairly broadly across the system, yet TransCanada proposes to continue the integrated tolling approach for all of the integrated Mainline except for TQM. In the context of the Mainline's integrated tolling approach, we are not persuaded to put significant weight on the argument that the TQM proposal improves adherence to the user-pay principle. We reaffirm the Board's views from RH-3-86:[48]

> The Board agrees that cross-subsidization should be avoided to the extent possible in designing tolls. The Board notes, however, that cross-subsidies are inevitable in

[48] RH-3-86 at p. 56.

an integrated toll design and while their elimination could be a desirable goal, it must be balanced against other principles such as fairness and equity.

We also note that TransCanada proposes to continue allocating the costs of the GLGT and Union TBOs in the integrated manner while singling out the TQM TBO for different treatment. While there are differences between the various TBOs held by the Mainline, there are also similarities, the most notable being that each TBO allows TransCanada to provide service that would otherwise have required construction of additional facilities.

We accept that the Mainline is facing significant competitive and toll pressures. However, we note that the TQM TBO proposal, in isolation, would only result in relatively small toll decreases for non-TQM services. We are also concerned that in order to achieve relatively small toll reductions for non-TQM services, the proposal creates far larger toll increases for most services that use TQM. Additionally, the proposal would divide the Québec market, creating significant toll differences for customers within close geographic proximity in the Montréal area, and create challenges for Gaz Métro's load balancing.

With respect to TransCanada's two potential remedies for concerns related to dividing the GMIT EDA, we find that neither is persuasive based on the limited evidence related to them. With respect to the remedy that would have Gaz Métro, through its own rates, remove the toll differentiation that would exist on the Mainline within the Gaz Métro area, this possibility was not explored in detail in the proceeding. For example, there was no discussion of the fact that the NEB does not have jurisdiction over Gaz Métro's rates. Nor was there consideration of whether this potential remedy would impact decisions to contract with Gaz Métro versus directly with TransCanada. Similarly, little was said regarding how this could impact the purported increased adherence to the cost-based/user-pay principle. This remedy also fails to address Gaz Métro's load balancing challenges. The second remedy, to keep the GMIT EDA intact and spread the TQM TBO surcharge across both TQM and TransCanada-owned facilities within this DDA, would solve the challenges related to charging different tolls in the Montréal area and related to Gaz Métro's load balancing. However, as with the first potential remedy, this would still treat TQM TBO costs very differently than any other Mainline costs and would still yield only small toll decreases on the majority of the Mainline while imposing large toll increases in the GMIT EDA.[49] In addition, as noted by TransCanada, spreading the TQM charge to non-TQM facilities lessens adherence to cost-based/user-pay principle, which was advanced as an argument in favor of the proposal.

Decision

We reject TransCanada's TQM TBO cost proposal.

[49] The toll impacts in the case of the second remedy were not put on the record. However, we note that approximately two-thirds of service to the GMIT EDA currently utilizes TQM, based on 2010 base year metered quantities.

7.4 Proposed Delivery Pressure Tolls Methodology

At certain Mainline delivery locations, because of the nature of the interconnecting downstream pipelines, the Mainline tariff guarantees higher minimum delivery pressure than what is guaranteed for the rest of the system. At these locations (Emerson 1, Emerson 2, Dawn, Niagara, Iroquois, Chippawa, and East Hereford), delivery pressure tolls and fuel are applied in addition to the regular transportation toll and fuel. Under the current methodology, established in GH-2-87[50] and RH-1-88,[51] delivery pressure tolls and related fuel are meant to recover the facilities and operating costs associated with providing additional pressure at these locations. The tolls and fuel are calculated individually for each of the above applicable locations, based on its specific costs and flows.

Views of TransCanada

TransCanada proposed two changes related to the delivery pressure tolls methodology. First, and more significantly, TransCanada proposed a system-wide average delivery pressure toll and fuel ratio that would apply uniformly to all applicable locations, rather than the current location-specific delivery pressure tolls and fuel ratios. Second, TransCanada proposed to calculate delivery pressure tolls based on a forecast of the following year's discretionary delivery pressure service units rather than crediting the corresponding discretionary revenues after-the-fact against the following year's location-specific costs.

For the first proposal, TransCanada indicated that its proposal would maintain the incremental tolling for delivery pressure service at applicable locations, consistent with the Board's GH-2-87 determination that delivery pressure is a distinct service that should be tolled incrementally. However, TransCanada acknowledged that the proposal would entail a greater degree of cost-averaging than the current methodology. While the proposal would remain consistent with the cost-based/user-pay principle, it was not being proposed based on those principles. Rather, the proposal reflects market realities.

TransCanada submitted that declining volumes at certain points have increased delivery pressure tolls dramatically. As a result, the current toll design provides a disincentive to flow gas to certain applicable points. In particular, TransCanada emphasized the need to address the current situation at the East Hereford export point, where volumes have dropped off to a point where its delivery pressure toll has risen from $0.06/GJ in 2007 to $0.21/GJ in 2011.

TransCanada expects the proposal to significantly reduce delivery pressure tolls and/or fuel rates at delivery pressure locations experiencing lower flows, while causing only minor corresponding increases at other applicable locations. Comparing the current and proposed method based on 2011 information, TransCanada estimated that the largest toll increase would be $0.009/GJ at Dawn, while the largest two decreases would be $0.2046/GJ at East Hereford and $0.0212/GJ at Chippawa. Chippawa and Iroquois would benefit the most from the fuel rate change (estimated 1.10 per cent and 0.45 per cent decreases, respectively) whereas at other locations there would be

[50] National Energy Board, GH-2-87, Reasons for Decision, TransCanada PipeLines Limited, Facilities, Tolls and Tariff, July 1988.

[51] National Energy Board, RH-1-88, Reasons for Decision, TransCanada PipeLines Limited, Tolls, November 1988.

an increased fuel rate of 0.24 per cent or less. TransCanada also indicated that based on 2011 data, the unadjusted East Hereford delivery pressure toll would be $0.2152/GJ, more than $0.18/GJ higher than the next highest toll at Chippawa. TransCanada acknowledged that its proposal was trying to avoid the potential for delivery pressure toll spirals.

TransCanada also indicated that the proposal would provide more stable delivery pressure tolls and fuel at all applicable locations.

With respect to the second proposal, to forecast delivery pressure service units rather than crediting those revenues after the fact when calculating delivery pressure tolls, TransCanada indicated that doing so would be consistent with how other Mainline tolls are calculated. To implement this change, 2012 would be a transition year, where discretionary revenues from 2011 and a forecast of discretionary 2012 volumes would both be reflected in the delivery pressure toll calculations. TransCanada submitted that this transition-year effect would mean that the average 2012 delivery pressure toll would be $0.0087/GJ, whereas it would have been $0.0124/GJ without the extra one-off crediting of 2011 delivery pressure discretionary revenues.

Views of Intervenors

ANE supported TransCanada's delivery pressure proposals. ANE indicated that the current methodology results in dramatic toll increases at some locations, which could inhibit future throughput that would otherwise benefit the system. ANE submitted that the current East Hereford delivery pressure toll alone is equivalent to the cost of transporting gas 325 km on the Mainline, and that the methodology needs to change in order to prevent the undesirable effects of a toll spiral at low flow locations.

BP argued that TransCanada's proposal violates sound regulatory principles and should be rejected.

MAS opposed the proposal to set identical delivery pressure tolls at all applicable locations. MAS submitted that it is contrary to cost causation, and that cost sharing should only be permitted when cost causation cannot be specifically identified.

Views of the Board

The current delivery pressure toll methodology has led to an unusually high delivery pressure toll at East Hereford. We are of the view that keeping the current delivery pressure toll methodology would ignore a significant issue that is currently present at East Hereford, and which could impact other applicable locations depending on future flow patterns. We agree that a very high delivery pressure toll at a particular location could deter volumes at that location, effectively leading to a localized toll spiral.

Accordingly, we find that it is reasonable and appropriate to use greater cost averaging when setting delivery pressure tolls and fuel rates. In the current circumstances, spreading the costs of delivery pressure service across all applicable locations still respects the user-

pay principle, while removing an impediment to certain flows that would otherwise provide revenues and billing determinants to the Mainline.

With respect to TransCanada's proposal to use a forecast of delivery pressure service units when calculating the corresponding tolls, we note that no party opposed this and that it would align with how other tolls are normally calculated. We find that this proposal and the 2012 transition methodology are appropriate.

Decision

Delivery pressure tolls and fuel rates shall be calculated as proposed by TransCanada.

7.5 Short-Term Adjustment Account

Many of the Mainline's costs and revenues are associated with deferral accounts. Normally, for such items, the differences between each year's actual and forecast costs and revenues goes into the corresponding deferral account, where the balances accrue interest until they are eliminated by being reflected in the following year's tolls.

Views of TransCanada

TransCanada proposed the creation of a STAA, to spread the recovery of deferral account balances across five years instead of a single year, thereby creating greater toll stability. At the end of each year, all deferral account balances would be eliminated by placing the cumulative offsetting amount in the STAA. The amount placed in the STAA in a given year would be amortized over the following five years.

TransCanada submitted that the magnitude of deferral balances has recently increased, primarily due to the greater relative importance of discretionary revenues on the Mainline, which are harder to predict than firm service revenues. TransCanada noted that factors such as weather and events such as hurricanes can impact discretionary revenues. TransCanada submitted that, as it showed was the case between 2004 and 2010, while annual cumulative deferrals are often large, the average variance over multiple years tends to be significantly smaller. Accordingly, recovering deferrals over an extended period could reduce the Mainline's substantial toll fluctuations, thereby helping it secure new contracts or keep existing ones.

TransCanada indicated that it would seek approval for the specific STAA additions when it seeks approval for final tolls, and that the STAA would form part of rate base. The first such approval would be sought when establishing final 2014 tolls. TransCanada indicated that its proposal to add $100 million to a LTAA, described below, mitigated the need to use the STAA for 2011 deferrals, and that because it was requesting approval of final 2013 tolls in this proceeding, there would be no occasion to place 2012 shortfalls in the STAA for 2013. Accordingly, the 2014 STAA addition would reflect the shortfalls from 2012 and 2013.

Views of Intervenors

APPrO submitted that TransCanada had provided persuasive reasons for spreading annual deferrals over five years, but that the 2011 shortfall should be added to the STAA.

APPrO also recommended that the STAA not accrue interest. This would incent TransCanada to minimize under-recoveries by operating as efficiently as possible and maximizing its discretionary revenues. It would also mean that TransCanada would share the costs of the 2011 shortfall, and it would further reduce the size of annual toll fluctuations caused by deferrals.

WEG expressed concern with the fact that the STAA's size would not be capped, and with Mainline cost deferrals in general.

MAS supported the creation of an STAA that would be amortized over three rather than five years, and that would be first used for 2013 instead of 2014. The shorter amortization would limit intergenerational subsidies and ensure that TransCanada is well positioned to respond to future market changes.

Tenaska supported the STAA proposal, stressing the importance of toll stability.

Ontario expressed concern that both the STAA and LTAA will blunt the cost-causation/user-pay principle. However, Ontario accepted both of TransCanada's proposals given the mitigating circumstances.

Views of the Board

We find that spreading the annual deferrals over more than one year would be justifiable to smooth the Mainline's annual toll fluctuations. However, we find that our decision to set multi-year fixed tolls and to establish the TSA, described in Chapter 12, means that there is no purpose for the STAA at this time. For this reason, we are not approving the STAA.

Decision

We deny TransCanada's requested STAA.

7.6 Long-Term Adjustment Account

Views of TransCanada

TransCanada proposed the creation of a LTAA to reduce 2012 tolls to the expected long-term range and to enhance the near-term competitiveness of Mainline, with the expectation that market conditions could be more favorable for the recovery of these costs in later years. TransCanada would place $100 million in the LTAA in 2012. It would be added to the Mainline's rate base and amortized in future periods at the Mainline's composite depreciation

rate.[52] The $100 million LTAA addition would reduce the 2012 revenue requirement by approximately $130 million, after factoring in the income tax and return impacts. It would then increase the revenue requirements in subsequent years as the LTAA is amortized.

TransCanada indicated that the choices of the precise $100 million amount and amortization period are matters of judgment. TransCanada made these choices with the objectives of immediate toll reductions and avoiding major inter-generational cost shifts. TransCanada suggested that the inter-generational effects of the proposal were not troubling in the context of the Mainline's approximately $6.2 billion rate base.

TransCanada submitted that it would be making a significant contribution with the LTAA, through the postponement of cash flow. Because the LTAA would be like an investment in the Mainline system, similar to pipe or compression, the LTAA should be amortized over a similar timeframe.

Views of Intervenors

APPrO accepted TransCanada's LTAA proposal, without indicating its reasons.

CAPP agreed with the proposal for an LTAA that would be added to rate base and amortized at the Mainline's composite system depreciation rate. However, CAPP recommended greater additions to the LTAA. In addition to TransCanada's proposed $100 million 2012 addition, CAPP proposed that any revenue shortfall from 2012 be added to the LTAA in 2013 (which CAPP originally estimated to be $183 million, but later estimated to be zero based on updated information). CAPP also proposed that an additional fixed amount, such as $100 million, be added to the LTAA annually from 2013 until the year where the negative balance in CAPP's proposed TSA is eliminated. This formed part of CAPP's multi-year fixed tolls proposal, which is further explained in Chapter 12. CAPP presented an analysis of its proposal that predicted that, if actual throughput equals TransCanada's base case forecast, the last $100 million LTAA addition would be in 2016.

CAPP indicated that its proposed extra LTAA additions were designed to change the Mainline's revenue requirement by approximately the same amount as would TransCanada's proposed shift in accumulated depreciation, which CAPP opposed. CAPP indicated that the $100 million annual additions were similar but not identical to the corresponding depreciation amounts, and that the precise annual LTAA contributions could be adjusted by the Board to change the duration of the TSA, or to account for decisions the Board makes that change the Mainline's revenue requirements from those in CAPP's analysis. CAPP also argued that its proposed LTAA additions would be no more risky for TransCanada than the deferral of capital recovery that would result from TransCanada's depreciation proposal.

CAPP acknowledged that the large LTAA deferrals that it proposed raise questions of intergenerational equity. However, CAPP suggested that the same issues arise under the Restructuring Proposal, due to the 2012 LTAA addition combined with deferring more than $100

[52] In addition to the $100 million 2012 LTAA addition, the existing "2010 Adjustment Charge" would be merged into the LTAA. The 2010 Adjustment Charge was originally an $85 million account created to lower 2010 final tolls.

million per year in depreciation expenses. CAPP's own proposal was preferable since it was more flexible and since it may not require deferrals to continue once the TSA is eliminated. CAPP argued that there are not many options to reduce tolls at this time, and that some deferral of cost recovery today, in the interests of future Mainline viability, is unavoidable.

Centra argued that costs underlying tolls on the Mainline have to be reduced and not simply deferred. Deferrals would create an economic incentive for customers who are in a position to lessen their reliance on the Mainline to do so as expeditiously as possible, before their share of the deferred costs is recovered in tolls. Centra argued that deferrals would be detrimental to the Mainline and its customers and not in the public interest.

MAS opposed any new additions to the LTAA. Such additions would negatively impact the long-term competitiveness of the Mainline, encouraging shippers to flee the system to avoid future cost increases. MAS contended that the proposed LTAA contribution would create long-term intergenerational inequity, and be counter to the public interest and sound ratemaking principles. Shippers that will be dependent on the Mainline long-term would bear the risk of paying amounts put in the LTAA, and costs should be recovered while billing determinants remain on the system.

Tenaska argued that while ongoing $100 million LTAA additions would be problematic, TransCanada's proposal was acceptable.

Ontario expressed concern that both the STAA and LTAA would blunt the cost-causation/user-pay principle. However, Ontario accepted both of TransCanada's proposals given the mitigating circumstances.

Québec did not comment expressly on the LTAA addition proposed by TransCanada, but indicated that it was opposed to intervenor proposals that deferred costs into the future, including through use of the LTAA. Québec argued that this only defers the problem, while the situation could get even worse.

TransCanada's Reply

TransCanada rejected MAS' assertion that the proposed $100 million 2012 LTAA addition violated sound ratemaking principles. All deferrals create a transfer of costs between periods, and MAS' logic suggested that deferrals should never be used. In reality, the use of deferral accounts is common practice in utility ratemaking and on the Mainline. The appropriateness of a given deferral depends on the amount of costs being deferred, weighed against various issues, such as intergenerational impacts, policy objectives, and competitive concerns. TransCanada suggested that if the economic viability of the Mainline is not maintained, future generations may not have economic access to the Mainline.

TransCanada also rejected MAS' assertion that the $100 million LTAA addition would encourage shippers to leave the system, submitting that the estimated long-term toll impacts were very minimal.

TransCanada objected to the magnitude of the LTAA additions proposed by CAPP. TransCanada acknowledged that the near-term reductions in tolls and revenue requirements would be similar if comparing CAPP's LTAA additions with TransCanada's depreciation proposal, but TransCanada submitted that CAPP's proposal was a postponement of cost recovery without justification while the depreciation proposal was a principled approach. CAPP's high deferrals materially increase inter-generational equity concerns. In addition, as discussed more fully in Chapter 12, TransCanada suggested that the magnitude of the deferrals under CAPP's multi-year fixed tolls proposal, through both the LTAA and TSA, threatens the regulatory compact.

Views of the Board

While we find that, in general, cost deferrals should be minimized, we agree with TransCanada that the appropriateness of a particular deferral depends on a variety of factors. As discussed more fully in Chapter 12, we find that large cost deferrals are appropriate in the Mainline's current circumstances. Accordingly, we approve the creation of the LTAA (and the merging into it of the 2010 Adjustment Charge account). We also find that adding the LTAA to rate base and amortizing it in future periods at the Mainline's composite depreciation rate is appropriate.

Chapter 12 provides our decision with respect to the amounts that will be added to the LTAA.

Decision

We approve the creation of the LTAA, and the merging into it of the 2010 Adjustment Charge account. The LTAA will be added to rate base, and amortized at the Mainline's composite depreciation rate.

7.7 Distance of Haul for Long-Haul Service

Many paths on the Mainline can be served by more than one route. For Mainline toll-making purposes, TransCanada calculates the distance of haul for each service type. Distances for short-haul paths are calculated based on the shortest possible route. Distances for long-haul domestic and export service are based on the longest possible route minus distance credits. The distance credits are meant to reflect that some of the volumes on many paths travel along short-cuts across the Mainline. The availability of distance credits in a given year depends on system flows and contracting practices.

Views of TransCanada

TransCanada proposed to calculate distance of haul for long-haul services based on the shortest distance of haul method, as is used for short-haul services. TransCanada indicated that there is not a single correct way to measure the distance of haul for short-haul or long-haul service on the Mainline, because transportation on the Mainline can be met by a variety of means and routes.

TransCanada submitted that the distance credit methodology was developed many years ago at a time when the vast majority of Mainline transportation went from the WCSB to the east. By contrast, the short-haul distance methodology was developed in the early 1990s in response to short-haul service requests. The shortest distance short-haul methodology was reaffirmed in RH-3-2004, where TransCanada contended that this method remained appropriate given the system's integrated nature and complexities which made it extremely difficult to determine the actual distance travelled by short-haul gas. TransCanada stated that the complexities are even greater today; with more supply sources, more short-haul transportation, and greater bi-directional flows. This has also made the distance credit system more arbitrary and less accurate.

TransCanada indicated that it has accommodated more short-haul transportation through displacement and by changing system flow patterns to minimize the need for new facilities and minimize costs. As a result, the availability of distance credits for long-haul, such as credits for the southern GLGT-Union route, has been reduced and has become less stable.

TransCanada submitted that neither long-haul nor short-haul transportation is met solely by one means or dedicated path. TransCanada stated that a consistent methodology based on shortest distance for both long-haul and short-haul will promote economic efficiency through proper price signals. The proposal will also be more transparent and lead to more stable tolls, since availability of credits fluctuate from year to year as flows change.

TransCanada showed that the proposed change would not significantly impact distance calculations and tolls for most paths. Based on 2011 distance calculations, the decrease in long-haul distance would have been approximately one per cent or less for each of the domestic toll zones; the long-haul distances to several export points in Ontario and Québec would have been four to six per cent less.

Views of MAS

MAS opposed the proposal, asserting that it was unjustified and violated the fundamental principle of cost causation and cost responsibility. MAS indicated that the distance credit method approximates the average distance of haul for long-haul services, and consequently approximates the cost contribution required by long-haul. The method recognizes that on any day the Mainline might utilize the longest haul, the shortest haul, or any combination of hauls in between. MAS acknowledged that short-haul transportation, like long-haul, can travel on more than one path, and indicated that MAS started from the premise that TransCanada's current method of determining distances for both long-haul and short-haul is a reasonable approach.

Views of the Board

We accept that the significant change in the use of the system, including increased short-haul transportation, increased displacement, and more bi-directional flows, has reduced the accuracy, stability, and transparency of the distance credit system. We are also of the view that, generally, it is important that long-haul and short-haul volumes be treated consistently, unless there is sound justification for distinct treatment. In this case, a key factor is that both long-haul and short-haul can travel along different paths. We also note

that the proposal would result in slightly more stable tolls and only minor toll level changes. Based on these factors, we find that it is appropriate to calculate distance of haul for both short-haul and long-haul services using the shortest distance of haul method.

Decision

Distance of haul for long-haul services shall be based on the shortest distance of haul method, as is used for short-haul services.

7.8 Method for Calculating Distributor Delivery Area Load Centres

To calculate the distance of haul to a DDA, TransCanada calculates a load centre based on metered deliveries within the DDA, to represent the weighted average distance that gas travels for deliveries into that DDA. Currently, two different DDA load centres are used for calculating Mainline tolls. First, for calculating the demand charge, a DDA load centre is calculated based on metered deliveries in only the winter period in the base year. Second, for calculating the commodity charge, a DDA load centre is calculated based on annual metered deliveries in the base year.

Views of TransCanada

TransCanada proposed to calculate DDA load centres based only on annual period flows. TransCanada submitted that this would be appropriate for both the commodity and demand tolls if the Board rejected its proposed elimination of the commodity component of the toll (see Section 7.2.1).

TransCanada stated that, historically, facilities were constructed to meet peak winter demand requirements. Therefore, since the demand toll is intended to recover fixed costs that are mostly related to capital costs of facilities, it was deemed appropriate to use winter metered flows for calculating the demand toll. On the contrary, since the commodity toll is intended to recover variable costs related to actual gas flows, annual metered flows were used in its calculation.

TransCanada indicated that today, although the Mainline's winter flows tend to be higher than summer flows, winter market requirements are no longer the primary driver behind Mainline transportation to most DDAs and a variety of market players need gas year-round. TransCanada submitted that the current methodology was meant to reflect that winter capacity was the constraining factor on Mainline paths, but that some paths are now constrained year-round or more constrained in the summer than in the winter. Accordingly, DDA load centres should be based on flows throughout the year. TransCanada also made the point that since tolls are not seasonal, they should be based on annual metered quantities.

TransCanada indicated that there is no significant difference between the load centres calculated on an annual and winter basis. Based on 2009 base year data, using annual flows rather than winter flows would lower the distance to the load centres of the TransGas SSDA and Centram

MDA by 4.5 per cent and 1.5 per cent, respectively. For all other DDAs, the distances from annual flows would be between 0.6 per cent lower to 0.3 per cent higher.

Views of Intervenors

MAS opposed the proposed change, indicating that it ignores the long-standing relationship between fixed-cost causation and fixed-cost responsibility, which is captured using winter load data. MAS submitted that TransCanada did not attempt to show that there has been a change in the nature of its fixed costs or the relationship between those costs and the Mainline's annual or winter usage patterns.

TransGas supported the proposed change, arguing that the seasonality that was historically reflected is no longer relevant.

Views of the Board

We agree with MAS that there has long been a recognized relationship between winter peak needs on the Mainline and fixed cost causation. Although TransCanada asserted that winter market requirements are no longer the primary driver behind Mainline transportation to most DDAs, TransCanada did not demonstrate that peak requirements, in particular, are not still mostly winter-driven. In fact, we note that in a number of instances in the proceeding, TransCanada emphasized the importance of winter demand or winter peaking on the Mainline; for example, TransCanada did so in the context of assessing the revenue that would be generated from IT and STFT bid floor flexibility, assessing the degree to which a facility might be utilized, and its own vision for the future use of Mainline long-haul. We find that winter metered quantities should be used for establishing DDA load centres. If the commodity toll were not eliminated, that portion of the toll would logically continue to use annual metered deliveries.

Decision

DDA load centres shall be calculated based on winter metered quantities.

7.9 Distance of Haul for STS and STS-Linked

Storage Transportation Service (STS) is a firm transportation service that provides for injections and withdrawals at storage locations. STS contract holders must hold a corresponding long-haul FT contract to their ultimate market point. Storage Transportation Service-Linked (STS-L) is similar to STS, but is intended for use in the unbundled LDC environment; accordingly, one difference is that the STS-L contract does not have to be held by the holder of the corresponding long-haul FT contract. STS and STS-L have the same one-year minimum contract term and renewal rights as FT. Tolls for these services are established using a unique methodology for calculating distance of haul. Namely, STS and STS-L distances reflect the difference between the distance from Empress to the storage location and the distance from Empress to the ultimate delivery point or DDA load centre.

Views of TransCanada

TransCanada proposed to change how the STS and STS-L distances of haul are calculated, to reflect the shortest distance from the receipt point to the delivery point or DDA load centre. This would mean that STS and STS-L distances would be calculated in the same way that other short-haul services are currently calculated, and the same way as all other transportation services if TransCanada's other proposals are approved.

TransCanada submitted that the distances calculated according to its proposal are more reflective of the actual distance travelled, which is appropriate since STS and STS-L flows have the same impact on system flows, and are served in the same fashion at any point in time, as FT transportation. Since a substantial amount of eastern short-haul now travels over the same paths as STS and STS-L, TransCanada contended that in order to be fair and cost-based, their distance methods should now align.

TransCanada indicated that in most cases, the current and proposed methodology yield similar STS and STS-L distances. However, for two paths, the current methodology severely underestimates the distance of haul. Namely, TransCanada's proposal would increase the Parkway to Enbridge EDA distance from 163 km to 468 km, and the Parkway to Enbridge CDA distance from five km to 75 km.

TransCanada submitted that overall, the proposed change would increase the annual revenues from STS and STS-L services. Based on 2011 final tolls, STS revenues would have been $12 million higher, which would have resulted in a $0.018/GJ reduction in the Empress to Enbridge SWDA toll.

Views of Intervenors

MAS opposed the proposed change, indicating that it was an unsupported, and therefore inappropriate, shift of cost responsibility on the system. MAS contended that it was insufficient to simply point to there being two different distance methodologies as support for the change. MAS also suggested that the fact that for most paths the current and proposed methodology yield similar distances lends to support for the current method. MAS indicated that a more rigorous analysis was needed to support such a change.

Views of the Board

We do not agree with MAS' contention that a more rigorous analysis is needed to support the proposed change. We find that the evidence shows that flows under STS and STS-L service have the same system impacts as flows under other short-haul firm services. Accordingly, the same distance methodology should be used for STS and STS-L as is used for other short-haul firm services.

Decision

STS and STS-L distances shall be calculated using the same distance methodology as is used for other short-haul services.

7.10 Treatment of the Eastern Mainline Expansion Costs

The Eastern Mainline Expansion (EME), with an estimated cost of $130.4 million, is a project undertaken by TransCanada to provide long-term firm service for 446,373 GJ/d of transportation from Niagara to Kirkwall and the Enbridge CDA. The Board approved the EME on 22 May 2012, pursuant to Board Order XG-T211-008-2012. The EME facilities include compression, 13 km of pipeline looping, and modifications to allow bi-directional flow. The in-service date was 1 November 2012 for a portion of the EME facilities, while others remain under construction. Most of the costs associated with the EME facilities were included in the Mainline's revenue requirement for 2012 and 2013.

Views of TransCanada

TransCanada expected the EME facilities would be included in tolls on a rolled-in basis. TransCanada stated this tolling treatment for new facilities is consistent with the toll design approved by the Board for the Mainline. TransCanada stated the EME responds to the changed competitive landscape faced by the Mainline, helping to prevent bypass of the Mainline by competing projects.

Views of Intervenors

CAPP suggested projects like the EME are different from historical Mainline expansions, in that they displace long-haul service rather than attract incremental gas. Although CAPP indicated western users of the Mainline should not bear the risk of under-utilized long-haul capacity caused by projects that expand short-haul service in the east, CAPP treated the EME costs on a rolled-in basis under its multi-year fixed tolls proposal. CAPP suggested under that proposal, TransCanada would have a strong incentive to ensure such projects would generate positive net revenue for the Mainline.

ANE stated it did not support a decision to break the bedrock of rolled-in tolling on the TransCanada system in this proceeding. ANE argued the record did not support a move away from rolled-in tolling for facilities expansions.

YEC argued the rolled-in treatment of costs is appropriate because no party proposed an incremental treatment, the record is not sufficient to find incremental tolling to be appropriate, and implementing incremental tolling would be a substantial change from the existing regulatory framework. Further, YEC observed if incremental tolling were to be implemented, the tolls paid by YEC would be dramatically higher than expected in the EME open season.

Views of the Board

We note that no intervenor proposed that the Board adopt an incremental tolling methodology for the EME facilities. We also note that the EME facilities are integrated into the Mainline, and that rolled-in tolling is a well-established aspect of Mainline tolling design. Accordingly, we find that costs related to the EME should be treated on a rolled-in basis.

Decision

We approve treating the costs of the EME facilities on a rolled-in basis.

7.11 Elimination of Backhaul Distinction

Backhaul paths are those that do not, at any time of the year, cause an increase in the physical flow of gas on Mainline facilities or increase the scheduling requirement for Mainline contractual TBO capacity. Backhaul paths include a number of zero distance paths. Both firm and interruptible backhaul service is offered on backhaul paths. Firm backhaul service is tolled at the FT daily demand equivalent, with no commodity component, and has a minimum contract term of one month. Interruptible backhaul is tolled at the FT daily demand equivalent in winter and at half of that level in summer. Neither firm nor interruptible backhaul currently has fuel requirements.

Views of TransCanada

TransCanada proposed to eliminate the backhaul distinction, and to eliminate the firm and interruptible backhaul services such that paths currently classified as backhaul would become forward-haul paths and be served by FT, IT and STFT services. TransCanada contended that the distinct treatment for backhaul is not warranted given the minimal number of backhaul paths and the minimal use of backhaul services.

Only a small portion of Mainline paths are currently classified as backhaul. TransCanada explained that with Mainline flow changes, including those related to Marcellus gas that will arrive at Niagara, many system segments and TBO arrangements have or are expected to become bidirectional, meaning even fewer backhaul paths.

Of the remaining backhaul paths, TransCanada indicated that very few are used and only interruptible backhaul is utilized (the last firm backhaul contract was billed in 1998). Backhaul services generated $1.2 million in annual revenues in 2010, almost all of which was from two zero distance paths for moving gas within meter yards (at Dawn from the Union system to the Enbridge system, and at Emerson from the GLGT system to the Viking pipeline). Annual revenues have varied from $1.1 million to $2.4 million over the last several years. TransCanada also indicated that there is administration involved with maintaining backhaul.

Views of Intervenors

BP opposed the elimination of the backhaul distinction, arguing that TransCanada did not advance any valid reason for the change, even though the distinction was implemented with sound regulatory backing. BP pointed out that the change would mean that backhaul paths would be subject to a fuel charge, albeit a small one, even though they use no fuel, and interruptible backhaul service would become biddable. BP concluded by arguing that the proposal was a revenue grab with no cost or principled justification and no material impact on tolls.

Views of the Board

In considering whether to eliminate the backhaul distinction, we find that different factors are relevant to the consideration of whether the distinction should be maintained as it pertains to firm service and as it pertains to interruptible service.

First, with respect to interruptible backhaul service, for the same reasons that we find that TransCanada should have flexibility in setting IT bid floors, we find that what is currently interruptible backhaul should be biddable and that TransCanada should have flexibility in setting the bid floors. Since this would then eliminate the meaningful distinction between forward haul and backhaul IT service, we find that eliminating interruptible backhaul service is appropriate.

With regard to firm backhaul service, the elimination of the commodity toll in section 7.2.1 of this Decision would further reduce its distinction from forward haul firm service. We also note that although firm backhaul has not been used in nearly 15 years, it could become used as a substitute for the eliminated IT backhaul. However, given the administration involved with maintaining backhaul, the limited distinction from firm forward haul that would remain, and the very limited revenues generated by interruptible backhaul services, we find that eliminating firm backhaul is also appropriate.

Decision

As proposed, the forward haul and backhaul distinction shall be eliminated, along with the firm backhaul and interruptible backhaul services.

7.12 Elimination of the Intra-Saskatchewan Tolling Methodology and the East-West Differential

TransCanada proposed to eliminate the intra-Saskatchewan tolling methodology and the East-West differential. No party opposed either proposal.

TransCanada indicated that the East-West differential was intended to represent the potential marginal cost differences of delivering gas to the "West" or the "East" for use in some instances of assigning constrained capacity. The differential has not been used since at least 2001 (prior records were not reviewed), and is not expected to be used in the foreseeable future. With the elimination of toll zones, the East-West differential would need to be revised if it were maintained.

TransCanada indicated that the intra-Saskatchewan tolling methodology addresses a unique situation in Saskatchewan where the FT distance of haul could be deemed negative, which the FT method cannot accommodate. However, this unique methodology will no longer be required if toll zones and the distinction between backhaul and forward haul are eliminated.

Views of the Board

We find that the proposed changes are appropriate, given the rationale provided by TransCanada, our decisions to eliminate the use of toll zones and the backhaul distinction, and the fact that no party opposed the changes.

Decision

The East-West differential and the intra-Saskatchewan tolling methodology shall be eliminated.

Chapter 8

Mainline Services and Pricing Proposals

8.1 Flexible Pricing of IT and STFT

TransCanada has traditionally constructed Mainline facilities only when those facilities are supported by long-term contracts for firm service. When those facilities are used at a high load factor, any remaining available capacity – caused by ambient-related conditions or contracted but unused firm capacity – is marginal. TransCanada offers two short-term services that take advantage of its available capacity: IT and STFT. When Mainline facilities are used at low load factors, there is abundant capacity and IT and STFT service may offer greater value to shippers compared to FT service because of the lower level of commitment required.

STFT service does not require the minimum one-year commitment from shippers that is required for FT service. STFT service is available for a term between seven days and one year less a day. It is not subject to curtailment or interruption, except in exceptional circumstances. In return, shippers must pay TransCanada for the transportation service purchased during the term of the contract irrespective of whether they use the Mainline to transport gas.

IT service does not require shippers to commit to transport a volume of gas, or to pay TransCanada if that volume is not transported, as is the case for FT service. IT service is subject to curtailment or interruption if higher priority service, such as FT service or STFT service, requires Mainline capacity. In essence, a shipper using IT service is not reserving any capacity on the Mainline to transport its gas.

A detailed history of the attributes and pricing of IT service and STFT service can be found in the Board's RH-1-99 Decision.[53] The pricing regime for IT service, or its predecessor services, has changed as the load factor on the Mainline has changed. For example, pricing for IT service (including its predecessors) has varied from the incremental cost of providing that service[54] to a (theoretically) unlimited amount.[55] STFT service was approved by the Board in its RH-4-93 Decision.[56] Pricing for that service has varied from being the same as the FT rate to a (theoretically) unlimited amount.

Currently, IT service and STFT service are offered through an auction process, with set minimum floor prices and a bidding mechanism that allocates the capacity to the highest bidder. Under the Mainline's current tariff, the IT bid floor is currently fixed at 110 per cent of the applicable FT toll for all paths and all periods, and the STFT bid floor is currently fixed at 100 per cent of the corresponding FT toll. There is no cap on the amount that may be bid for IT and STFT.

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[53] National Energy Board, RH-1-99, Reasons for Decision, TransCanada PipeLines Limited, Tariff, April 2000.

[54] National Energy Board, RH-1-78, Reasons for Decision, TransCanada PipeLines Limited, Rates, July 1978; National Energy Board, RH-2-83, TransCanada PipeLines Limited, Tolls, July 1982.

[55] National Energy Board, RH-4-91, Reasons for Decision, TransCanada PipeLines Limited, Tolls, March 1992; RH-1-2002.

[56] National Energy Board, RH-4-93, Reasons for Decision, TransCanada PipeLines Limited, Tolls, June 1994.

Views of TransCanada

TransCanada sought approval to have flexibility, on any path at any time of year, to:

- increase the bid floor for IT as high as 160 per cent of the corresponding FT toll;
- increase the bid floor as high as 140 per cent of the corresponding FT toll for Seasonal STFT, 150 per cent for Monthly STFT, and 160 per cent for Weekly STFT; and
- set the IT and STFT bid floors to as low as 100 per cent of the FT toll.

TransCanada submitted that different paths are valued differently in the market and the value of any path may change over time. The current system-wide fixed bid floor approach neither recognizes this diversity nor provides any ability for TransCanada to respond to these changes in value. TransCanada sought the flexibility to better optimize throughput and revenues on the system which would benefit shippers through lower FT tolls overall.

TransCanada submitted that, given the current level of system utilization, the current tolls for discretionary services provide little incentive to use FT service. TransCanada is not able to capture increased discretionary revenue to lower tolls for the benefit of FT shippers, and there is greater toll instability due to difficulty in projecting short-term contracting and throughput. According to TransCanada, it has a duty to innovate and pursue initiatives in order to remain economically viable. Enhanced pricing flexibility would help TransCanada achieve this objective.

TransCanada sought to preserve the value of FT service relative to discretionary services, reduce or reverse the migration from FT service to discretionary services, and increase discretionary revenue on a per-unit basis. Higher IT and STFT tolls during certain periods would reduce FT tolls from what they would be otherwise, and thus make the Mainline more competitive and less susceptible to bypass risk.

TransCanada submitted evidence that the market value for long-haul capacity on the Mainline between NIT and Dawn has exceeded 160 per cent of the underlying FT toll on numerous occasions since 2004. In addition, the market value for short-haul paths has also exceeded this level. However, as a result of uncontracted capacity on the system, shippers rarely bid above the current bid floors for STFT and IT services, even when the value of transportation exceeds the total transportation cost. TransCanada submitted the ability to establish the minimum bid floors at up to 160 per cent of the applicable FT toll for the shortest-term contracts would allow the Mainline to capture some of that benefit for firm shippers, while reasonably reflecting the value of the short-term services relative to FT service. TransCanada estimated this would result in increased annual revenue of $20 million to $80 million.

TransCanada stated its proposal was consistent with prior Board decisions regarding the need for flexibility in the pricing of short-term services to preserve the value of FT. According to TransCanada, the Board has approved tolls for IT and STFT that were between market value and incremental cost, and has recognized that, at times, the prices would be above the applicable FT toll.

TransCanada calculated that on a fully allocated cost basis, the proposed bid floors for IT and STFT service could be considered cost-based. The annual average load factor[57] for the twelve months ended October 2011 was 64 per cent for western Mainline short-haul IT flow and 63 per cent for eastern Mainline short-haul IT flow. Therefore, TransCanada's proposed IT bid floor of up to 160 per cent would recover no more than the equivalent fully allocated cost of these short-haul IT flows.[58] Long-haul IT flow for this same period had a much lower load factor, and thus the equivalent fully allocated cost for this service would be well above TransCanada's proposed IT bid floor of up to 160 per cent. TransCanada indicated that similar results on a fully allocated cost basis would occur for STFT service as well for this period.

Accordingly, TransCanada concluded that the proposed bid floors are consistent with, or lower than, the tolls that could be derived based on the fully allocated costs for these services. However, such tolls would not account for the inherent value in contracting flexibility of these short-term services. Therefore, TransCanada submitted that minimum bid floors above those proposed by TransCanada would also be reasonable.

TransCanada submitted that a higher bid floor range could provide additional flexibility and opportunity to optimize revenues; however, selling capacity at a market-clearing price below the FT toll, would be inconsistent with the objective of preserving the value and promoting contracting of long-term firm services. TransCanada insisted that it would not be in the Mainline's competitive interest to maintain prices for short-term services at unsustainable levels throughout the year, as this would exacerbate the existing tolling situation.

TransCanada indicated that in the U.S., the FERC has permitted very broad flexibility in pipelines offering negotiated rate alternatives to the cost-based service as long as there is a cost-based recourse rate. Negotiated rates may be higher than the recourse cost-based FT rates because there is another feature that the shipper finds attractive. However, the presence of the recourse rates constrains the pipeline's potential market power. TransCanada submitted that its discretionary pricing proposal is still cost-based, since the increase in bid floors is tied to the cost-based FT rate.

TransCanada submitted that it would have a powerful and over-riding incentive to optimize revenues by actively adjusting the bid floors for discretionary services. Doing so would help to keep FT tolls as low as possible and thus improve the long-term viability of TransCanada, and the probability that TransCanada would recover its investment in the Mainline.

TransCanada submitted that no party can guarantee the outcome of a proposed change, but that does not mean TransCanada should not take steps to improve the Mainline's competitiveness. Even if TransCanada's proposed pricing flexibility were not to increase FT contracting, it would provide the opportunity to generate additional discretionary revenue that would lower FT tolls and make the Mainline more competitive. According to TransCanada, this would result in the

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[57] The average annual load factor is the ratio of the average load throughout the year compared to the maximum load on the system during the year. For example, an annual load factor of 60 per cent means that if 100 units of capacity were used during the peak day, an average of 60 units were used to provide that service over the course of the year. Conversely, the capacity would not have been used 40 per cent of the time, on average.

[58] Paying $1.60/GJ for 63 per cent of the year equates to approximately the same amount as paying $1.00/GJ for 100 per cent of the year, because $1.60/GJ multiplied by 0.63 equals $1.008/GJ and $1.00/GJ multiplied by 1.0 equals $1.000.

Mainline retaining its existing FT contracting by minimizing the threats of de-contracting and bypass.

TransCanada asserted that posting the applicable bid floors for each path, as detailed in the Application, would ensure that all shippers have transparent access to IT and STFT services. TransCanada also proposed to continue posting information related to successful IT and STFT bids, as is currently done. TransCanada submitted that its current posting requirements were the result of customer consultation that attempted to balance transparency of bidding results with the requirement for customer confidentiality of commercially sensitive information. TransCanada indicated that it would be prepared to consider the posting of additional information to the extent that such disclosure reflects a stakeholder consensus and addresses concerns of confidentiality, relevance and reasonableness, and does not negatively impact the Mainline's ability to optimize discretionary revenue.

Views of Intervenors

Several parties were opposed to TransCanada's discretionary pricing proposal.

MAS submitted that TransCanada failed to provide sufficient evidence to demonstrate that the proposed changes would improve the long-term sustainability of the Mainline.

Centra submitted that the lack of information and protocol around the proposed flexibility introduced uncertainty and left Centra with the inability to properly plan its operations with regard to the use of these services. Centra argued the proposed flexibility violates section 62 of the NEB Act whereby the resulting tolls would not be just and reasonable. In Centra's opinion, TransCanada's ability to charge higher rates based on delivery points where customers are considered captive could violate section 67 of the NEB Act, which prohibits a company from making any "unjust discrimination in tolls, service or facilities against any person or locality". Centra further argued the manner in which TransCanada will assess the maximum price for the discretionary services is contrary to section 60 of the NEB Act, since the toll will not be "specified in a tariff that has been filed with the Board and is in effect, or approved by an order of the Board". In Centra's view, setting the rate in this fashion is not transparent, encourages TransCanada to be arbitrary and leaves room for error that will be difficult to review, even on a retrospective basis. Centra submitted if the Board were to approve the proposed flexibility, it will have refrained from regulating an important component of TransCanada's service.

Tenaska submitted that TransCanada's preoccupation with forcing shippers to contract for one-year firm service is misconceived and very likely counterproductive in the current competitive environment. In doing so, Tenaska concluded that TransCanada is effectively refusing to compete in the market for short term transportation services and has put the Mainline at a competitive disadvantage.

Tenaska indicated a proper cost-based toll for short-term services would be the 100 per cent load factor FT toll. Tenaska submitted that, in principle, the tolls charged for all pipeline services should be cost-based, and therefore, the Mainline's short-term services should be priced at the FT level. Tenaska suggested that if the criterion for setting pipeline tolls at a just and reasonable

level were that tolls reflect the value of pipeline services, there would be no point in regulating pipeline tolls. Customers would never pay more for a service than its value to them, so any toll a customer could be persuaded to pay would be just and reasonable on that analysis.

Tenaska submitted that higher tolls for discretionary services could lead to lower demand for Mainline service, higher demand for alternative pipelines, increased costs for captive customers, lower NIT prices, increased Mainline diversions, and eventually bypass of the Mainline. Tenaska indicated the flexibility to discount the IT and STFT floor prices would be entirely at TransCanada's discretion and it would generally have no financial incentive to reduce IT and STFT tolls. TransCanada would usually benefit from those tolls being as high as possible. According to Tenaska, there would be no reason to expect TransCanada to use the proposed pricing flexibility in most situations.

Other intervenors supported increased flexibility in the pricing of discretionary services, but had some concerns with TransCanada's proposal.

CAPP submitted that discretion would not be acceptable as proposed because of the lack of accountability. However, CAPP asserted its multi-year fixed Mainline tolls proposal would discipline the exercise of this discretion by TransCanada. Thus, with the incentives under CAPP's proposal, TransCanada would have a strong motivation to manage this discretion prudently and in a manner that is customer responsive. CAPP also suggested TransCanada should be able to price below the full FT toll level to attract volumes to the Mainline.

CAPP was also concerned with transparency and proposed that, if given pricing flexibility, TransCanada should make timely information available to all potential users of the discretionary services. CAPP stated such information would include the paths available for bidding, the minimum floor price by path, the individual bid prices by path without identifying the bidder, the winning bids by path without identifying the bidder, and the capacity awarded by path. This would, in CAPP's opinion, provide consistent information to all market participants, and further enhance accountability.

APPrO submitted that allowing market based tolls for STFT and IT would allow the Mainline to better maximize future system utilization.

IGUA submitted the magnitude of the under-utilized capacity is so significant that it allows discretionary shippers to contract for discretionary services knowing that they will rarely, if ever, be curtailed. This results in long-term firm and IT shippers receiving essentially identical transportation services but paying very different costs, since firm shippers pay demand charges 365 days of the year and IT shippers do not. This sends incorrect price signals to those discretionary shippers who are receiving a virtual firm service without fear of interruption.

ANE observed that TransCanada is transforming into a peaking pipeline and submitted this reflects a decline in the reliability benefits of FT service relative to IT service. In ANE's view without substantial pricing adjustments, IT service would further erode TransCanada's ability to optimize revenues. ANE submitted that broad pricing flexibility is needed to address the substantial concerns associated with excess capacity. ANE recommended the maximum bid floor

for IT service be set at 300 per cent of the corresponding FT toll to bring FT tolls closer to the levels representative of a fully contracted system. The extra discretion would, according to ANE, allow TransCanada to capture the extra revenue that may be available in peak periods, when it may be able to price the service at levels that would exceed 160 per cent of the FT toll.

ANE submitted that FT shippers should commit to paying a full proportionate share of TransCanada's annual revenue requirement based on the contract quantity and associated distance of haul and any future toll adjustments attributable to variances in TransCanada's throughput or costs. STFT shippers should commit to paying fixed charges for 7 to 364 days of the year, on average, committing to less than 10 per cent of the commitments of FT shippers. ANE observed that IT shippers make the shortest and least commitment for the transportation service received as there is no commitment to pay any fixed charge for service or to make any future contribution to the costs of facilities relied upon to provide IT service.

According to ANE, the revenue consequences of failing to provide TransCanada with adequate pricing discretion for IT and STFT service would be significant. The consequences would not harm IT shippers that may pay more for service that entails no commitment, but would harm FT shippers that must pay all of the unrecovered costs of excess TransCanada capacity. ANE noted that IT shippers have the option of purchasing STFT service or FT service if either of these services better meet the shippers' needs for daily toll certainty.

ANE agreed that TransCanada had identified the proper factors to consider in applying the pricing discretion. However, ANE indicated it would be essential to provide a means of ensuring that shippers are protected against TransCanada setting a bid floor below 110 per cent in situations when it is not absolutely necessary. ANE stated that its proposed revenue incentive mechanism would provide such a safeguard.

ANE submitted that in the absence of an incentive mechanism, the Board could require TransCanada to report more regarding its performance in setting bid floors. In that case, ANE suggested TransCanada should retain information that it uses to set bid floors. For example, flow data on popular IT and STFT paths such as Empress to Emerson, and basis differentials, should be included in reports to the Board.

Views of the Board

Natural gas pipeline projects require significant upfront investment, which is usually underpinned by long-term contracts. It is generally expected that these costs will be recovered continually over the life of the pipeline. Accordingly, shippers who enter into firm contacts with a pipeline company are essentially agreeing to pay a share of the costs for the pipeline facilities over the term of the firm contract. Although firm shippers must pay for the transportation service regardless of whether they use the Mainline to transport gas, they have the benefit of requesting TransCanada build additional facilities or provide additional transportation services if increased capacity is needed.

In circumstances where a pipeline is well utilized with much of its capacity contracted for firm service, the annual costs of the pipeline are distributed among firm shippers. When

spare capacity is available on the pipeline, over and above the capacity needed to meet firm shipping requirements, the pipeline can earn additional revenue by offering discretionary services such as IT or STFT and credit this revenue to the gross revenue requirement. The Board applied this rationale in deciding to approve the STFT service in its RH-4-93 decision. In this decision, the Board noted that TransCanada applied to implement STFT service "because it had small increments of excess capacity available for short periods of time."[59] In approving STFT service, the Board reasoned that STFT service would enable TransCanada to "increase revenues for the benefit of all firm shippers."[60]

Since firm contracts have priority in accessing pipeline capacity, in a high load factor environment, discretionary services may be prone to interruption making them unreliable and unattractive to shippers. In a low load factor environment, there is little incentive for shippers to contract for firm service if the FT toll is similar to the toll for discretionary services because shippers can obtain flexibility of using the pipeline without committing for an entire year.

In the current circumstances of underutilization, users of discretionary services receive virtually guaranteed service whenever they need it, but pay for only a portion of the annual costs of the capacity, making it difficult for TransCanada to recover the costs of that capacity. In our view, allowing TransCanada to charge higher rates for discretionary services will provide it with a better opportunity to recover the costs of that capacity from those who use it, during the period of time in which it is used.

IT and STFT Pricing and FT Recourse Rates

In this Decision, we have decided to go further than what TransCanada applied for in respect of pricing for IT and STFT service. TransCanada proposed that it be allowed to set bid floors for IT services as high as 160 per cent of the FT toll and bid floors for STFT services as high as 140 to 160 per cent of the FT toll, depending on the length of the term. We see fit to give TransCanada full discretion to determine the bid floors for IT and STFT services at any level with one exception. TransCanada will have the discretion to set bid floors for STFT only at 100 per cent of the corresponding FT rate or higher. It is up to TransCanada to determine bid floors that better maximize system revenues. This goes into effect on 1 July 2013.

We recognize that giving TransCanada the flexibility to increase and decrease bid floors may give it the opportunity to charge very high tolls in certain markets and at certain times, for example, during significant weather events. We are of the view, however, that it is important to provide TransCanada with the necessary tools to capture market opportunities, if and when they arise, and to recover costs associated with its system from those who use it. The vast majority of the revenue earned through discretionary services will be credited to reducing TSA balances.

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[59] National Energy Board Reasons for Decision RH-4-93, TransCanada PipeLines Limited, Tolls (June 1994) at p. 57

[60] *Ibid.*

We are of the view that it is just and reasonable for shippers who need guaranteed access to the Mainline throughout the year to pay for the full annual costs related to the capacity they need. Shippers that truly require Mainline service can cap their exposure to discretionary tolls by opting to contract for FT service. In this way, FT tolls act as a recourse rate to protect shippers from high tolls for discretionary services.

In our view, the existence of a cost-based recourse rate, the FT toll, provides an implicit cap for discretionary shippers that need guaranteed access to the Mainline to meet their requirements. These shippers may elect to contract for FT service and pay the annual costs related to the capacity they need. Alternatively, they may find features of the IT and STFT services more attractive and accept the risk that at certain times of the year they may have to choose between paying high discretionary tolls or not using the Mainline.

Moreover, we are of the view that the ability of TransCanada to charge for discretionary services at whatever level will be constrained. All shippers purchasing FT service at recourse rates may resell capacity in the secondary market to mitigate demand charges. And, as indicated by ANE, it is unlikely there will be many days when TransCanada will be able to achieve pricing for IT and STFT service over a pricing level of 300 per cent for the FT toll.

For these reasons, and given the reporting requirements discussed below, we find that the tolls for IT and STFT service set pursuant to this Decision will be just and reasonable.

Pricing of IT and STFT is not Unjustly Discriminatory and Does Not Violate section 67 of the NEB Act

Centra contended that any move by TransCanada to charge higher rates based on delivery points where customers are considered captive could be a violation of section 67 of the NEB Act.

We find that it would not be unjustly discriminatory for TransCanada to raise the bid floor and charge higher rates for some delivery points, but not others. As we stated above, eliminating the cap on the minimum bid floor for IT and STFT service, subject to the floor for STFT not being lower than the FT toll, enables the Mainline to recover the cost of its capacity from shippers that use the Mainline to meet their requirements. In our view, it is not unjust that these shippers pay for that capacity.

Shippers can choose to purchase FT service at the cost-based recourse rates set by the Board. Alternately, there may be an advantage in using flexible discretionary services, such as an annual discount relative to the 365-day FT rate. TransCanada will set bid floors on each path based on numerous factors such as the availability of competitive alternatives in each locality. The Board expects that prices will be set differently in different localities because of different circumstances in each locality. Ultimately, the magnitude of tolls that can be charged is capped by the cost-based FT recourse rate. In our view, neither the ground for treating shippers of different localities differently, nor

the potential magnitude of the differential treatment, constitutes unjust discrimination within the meaning of section 67 of the NEB Act.[61]

TransCanada's Discretion in Setting Bid Floors

As TransCanada exercises its discretion in setting bid floors, pipeline throughput may increase or decrease. There is no guarantee that the overall revenue will be higher, but having the flexibility to charge higher tolls for discretionary services provides the Mainline with the opportunity to generate greater revenue and recover the costs of its capacity from those who use it. Similarly, the flexibility to discount tolls gives the Mainline the opportunity to retain volume and attract incremental revenue. TransCanada must compete and it is TransCanada's responsibility to manage the pipeline. It will be imperative for TransCanada to carefully and effectively use its discretion in promoting the use of the pipeline.

Centra contended that if discretion was conferred upon TransCanada to set the minimum bid floor then it would not promote transparency, accountability in toll making and it also would allow for misjudgments. It is our opinion that the multi-year fixed tolls and net revenue incentive mechanism implemented in this Decision provide TransCanada with strong incentives to make appropriate decisions in how it prices IT and STFT. If TransCanada makes material misjudgments about how IT and STFT services are priced – for example, by pricing those services too high and encouraging bypass of the Mainline, or by pricing those services too low and missing out on revenue – then it will have larger deferrals of revenue than it otherwise would. Moreover, as we noted in Chapter 4 of this Decision, the Mainline faces fundamental risk. Material misjudgment in the pricing of IT and STFT services may result in that risk materializing and cost disallowances occurring, making TransCanada accountable for the effects of its business decisions.

As for transparency, we agree with Centra and others that transparency is important. Accordingly, to ensure transparency we direct TransCanada to post sufficient information including that outlined in its Application. This includes applicable bid floors for each path and information related to successful STFT and IT bids. During the hearing, TransCanada indicated it is prepared to consider the posting of additional information to the extent that such disclosure reflects a stakeholder consensus and addresses concerns of confidentiality, relevance and reasonableness, and does not negatively impact the Mainline's ability to optimize discretionary revenue. As suggested by CAPP, this could include the individual bid prices by path without identifying the bidder, the winning bids by path without identifying the bidder, and the capacity awarded by path.

We direct TransCanada to consult with stakeholders and file with the Board as part of the Compliance Filing for this Decision:

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[61] In its argument, Centra also alleged that TransCanada's proposal for STFT and IT service pricing violated section 60 and 62 of the NEB Act. We did not address these arguments in this Decision because Centra did not explain how TransCanada's pricing proposal would contravene those sections.

- the information to be posted for shippers to ensure transparency in the way TransCanada sets bid floors; and
- the information to be contained in quarterly reports to the Board regarding TransCanada's management of bid floors.

Tolls for IT and STFT will be regulated on a complaint basis. Should any interested person be denied access to the recourse rates, the interested person may file a complaint with the Board.

Decision

The Board grants TransCanada full discretion to set bid floors for IT service and discretion to set bid floors for STFT service at 100 per cent of the FT toll or higher.

8.2 Minimum Term for STFT

Views of Intervenors

ANE proposed that the minimum term for STFT service be increased to five months to reflect the current and expected market circumstances on TransCanada. ANE contented that, in order to maintain its competitiveness, TransCanada must realize appropriate revenue levels from shippers requesting firm service. In ANE's view, a five-month commitment is reasonable in view of the substantial facility investments made by TransCanada to provide firm service.

ANE submitted that STFT offers shippers the ability to lock up firm capacity rights on TransCanada for a short period at a steep discount relative to the year-round costs of the service. Even though TransCanada has proposed to increase the maximum bid floor for STFT service, in ANE's view, the short commitment would still undercut TransCanada's firm revenue opportunities.

ANE suggested that allowing shippers to secure firm rights on TransCanada's system to meet peak needs without committing to paying for the costs of the associated facilities results in a revenue requirement shortfall. According to ANE, the existing regulatory framework has allowed TransCanada to pass on the unrecovered costs of its system to remaining firm customers and a substantial portion of the toll increases over recent years could be attributed to the revenue shortfalls caused by selling STFT service.

ANE indicated that even if TransCanada were able to increase the bid floor to 160 per cent of the corresponding FT toll for all STFT service with terms of less than one month, shippers would still be able to acquire service for seven days during the peak period at a 97 per cent discount compared to the annual costs of providing service. Reducing the discount from 98 per cent, as it is with current bid floors, to 97 per cent would have virtually no impact on curtailing the future migration of FT to STFT service.

ANE further submitted that increasing the minimum term for STFT service to five months would continue to provide shippers with a substantial discount compared with the annual costs of providing service and with traditional FT service. Under a minimum term of five months, STFT shippers would avoid 58 per cent of the costs of subscribing for annual firm service at the bid floor of 100 per cent of the corresponding FT toll. Therefore, even with the longer minimum term, FT shippers would still subsidize the costs of providing firm service for periods that are shorter than a year; however, the level of the subsidy would be significantly reduced.

Views of TransCanada

TransCanada indicated that extending the minimum term of STFT from seven days to five months would be a significant change. TransCanada believed its proposed term-differentiated bid floors for STFT service, whereby lengthier STFT terms would be subject to lower maximum bid floors, would provide a sufficient incentive to encourage longer-term STFT contracting at this time. TransCanada stated that it would remain open to considering the appropriate minimum terms of STFT service, as it gains experience with the impact of having bid floor flexibility.

Views of the Board

We gave significant thought to ANE's proposal to impose a minimum term of five months for STFT service. We agree with ANE that STFT and IT are currently very similar, but STFT is a superior service and its greater value should be reflected in tolls. However, we reject the five-month minimum term approach in favour of conferring greater pricing discretion on TransCanada. We also agree with TransCanada that it should first gain experience with the impact of having bid floor flexibility before imposing a minimum term of five months for STFT. In our view, providing TransCanada with unlimited discretion to adjust bid floors will help to differentiate these services. However, STFT tolls may not be set lower than FT tolls so that STFT does not erode FT service.

Decision

The Board denies ANE's proposal. The minimum term for STFT will remain seven days.

8.3 STFT Premium Timing

Views of TransCanada

TransCanada submitted that shippers currently bid for STFT service in the form of an absolute bid price ($/GJ/d), with the bid floor reflecting the FT toll in effect during the bidding period. Accordingly, if a bid is placed for STFT service in a future period, the bid floor for STFT service may not reflect the FT toll that would be in effect when the STFT service would be used.

TransCanada proposed to change the existing bid mechanism for STFT service to reflect the percentage of the FT toll in effect at the time service is provided. TransCanada submitted this

change would eliminate gaming and negative incentives associated with the current bid mechanism, provide the potential to generate additional revenue, and better reflect the appropriate pricing relationship between FT and STFT services. The changes proposed for STFT service are also proposed for Short Term Short Notice (ST-SN) service, with the exception that the bid floor and bidding mechanism for ST-SN service will be based on the Firm Transportation Short Notice (FT-SN) toll rather than the FT toll.

Views of Intervenors

Tenaska submitted that changing the STFT contracting practice as suggested by TransCanada would significantly increase the risk associated with holding STFT by exposing shippers to the same toll risk as FT service. The potential for FT tolls to significantly and unpredictably change during the term of an FT contract is a major risk for potential shippers. Tenaska submitted that risk cannot be hedged, and it is much more significant than previously believed.

According to Tenaska, STFT is a very low-value service, because of its lack of operational flexibility. Tenaska submitted that the main feature of STFT that distinguishes it in a positive way from FT is the absence of toll risk, and the fact that a shipper can hedge or lock in a set of market transactions based on an accepted STFT bid.

Tenaska contended that it is not necessary or appropriate to eliminate the one meaningfully positive feature of the STFT service while increasing the price of the service by up to 60 per cent. To preserve at least some value for STFT, Tenaska suggested that TransCanada should retain the current bidding mechanism.

Considering shippers bid for STFT and any impacts would be minor, Tenaska indicated that it is not unreasonable for STFT shippers to pay more or less than the corresponding FT toll over some relatively short period. Tenaska suggested the Board should reject the changes proposed by TransCanada, as they are unfair and unreasonable as a matter of toll design, and would harm Mainline shippers and other stakeholders by making the Mainline less competitive. Section 8.6 of this Decision addresses Tenaska's proposal to enhance the STFT service by providing STFT shippers with the standard diversion and RAM shipper flexibility mechanisms that are currently available to FT shippers.

TransCanada's Reply

TransCanada submitted that there is no reason to justify allowing STFT shippers to lock in a toll for a future period when FT shippers cannot. TransCanada indicated that Tenaska's argument that the impacts may potentially go in either direction, ignores the fact that bidders would have reasonable information on the likely tolls in the upcoming year, and under the current mechanism, would have an extra incentive to contract for future STFT service prior to a toll increase, or to delay contracting for STFT service until after a toll decrease.

TransCanada submitted the difference between the revenues derived by STFT under the existing and proposed approaches can at times be significant and are not evenly distributed between shortfalls and surpluses. TransCanada estimated such shortfalls for the last two Mainline toll

increases were $34 million and $41 million, respectively. In contrast, there was only one situation between 2007 and 2011 that resulted in STFT shippers paying more than FT shippers because of a change in the FT toll. In that case, only $4.2 million of STFT revenue was derived relative to the revenue that would have been derived at the FT toll in effect. TransCanada concluded that the amounts have been significant and the results have been asymmetrically negative.

Views of the Board

STFT and ST-SN offer firm service for shorter periods of time. Due to their greater flexibility, we see short term services as premium services. Offering STFT for periods of up to 364 days at a discount to FT would create perverse incentives, similar to the gaming of expected FT toll changes, as described by TransCanada. However, we note that these perverse incentives will likely be avoided while the Mainline is operating under multi-year fixed tolls.

Decision

We find that STFT should be priced at a premium based on the FT toll in effect at the time the service is provided, and ST-SN should be priced at a premium based on the FT-SN toll in effect at the time the service is provided.

8.4 FT-SN Premium

TransCanada proposed to maintain the existing tolling methodology and 10 per cent toll premium for FT-SN service for 2012 and 2013. No parties were opposed to this proposal.

Decision

A 10 per cent premium for FT-SN remains appropriate. We approve the continuation of this premium.

8.5 Multi-Year Fixed Price Service

Views of TransCanada

TransCanada proposed a new Multi-Year Fixed Price (MFP) service that would be similar to FT service, with the main differences being that tolls would be set for periods ranging from three to five years and the MFP service would have longer minimum contract terms than FT service. The tolls for a particular MFP block would be set prior to it being offered in an open season, except the toll for the first year of service would be equal to that year's prevailing FT toll. TransCanada would pre-set the tolls for subsequent years based on its forecast of FT tolls in those years. TransCanada would file all but the first year's MFP tolls under paragraph 60(1)(a) of the NEB Act.

TransCanada would have sole discretion over whether to offer MFP service blocks, over what paths, and for what term(s) (three, four, and/or five years). MFP blocks would be offered in the same open season process used for FT service. Although TransCanada generally expected that MFP service would be offered every year and on most paths, it may not be offered in cases where, for example, it expected that doing so would not attract incremental billing determinants on a particular path or it foresaw significant throughput uncertainty. TransCanada provided additional details regarding aspects of the MFP service such as the proposed terms and attributes of service, open season postings, and criteria it would use in exercising its discretion around what MFP blocks to offer.

TransCanada indicated that it developed the MFP service in response to shipper interest in a service that provides toll certainty over an extended period of time. TransCanada indicated that significant recent Mainline year-to-year toll volatility and uncertainty has been a disincentive for shippers to sign Mainline contracts. The MFP service could promote additional and longer-term Mainline contracting, which could lower and stabilize tolls for all shippers. Accordingly, TransCanada would choose what MFP blocks to offer with the objectives of encouraging incremental long-term contracting and toll stability.

TransCanada submitted that MFP tolls would be cost-based and the service would align with the Board's other principles and requirements. The service would not be unjustly discriminatory because any toll differences between MFP and other services would appropriately reflect different circumstances, and because when offered, MFP service would be available to all parties through the open season process and parties could choose FT if they preferred it over MFP service.

In cross-examination, TransCanada indicated that it would be willing to accept what it referred to as the principal risk associated with the MFP service, subject to certain modifications to its original proposal. By principal risk, TransCanada meant that to the extent that MFP tolls were lower or higher than the corresponding year's FT tolls, this would be solely to TransCanada's loss or gain, respectively. However, TransCanada made it clear that it was not amending its original application for MFP service, while suggesting it would discuss this issue with its stakeholders.

Views of Intervenors

APPrO supported the MFP service, but only if TransCanada accepted the principal risk that is described above. ANE and Ontario, on the other hand, supported the MFP service as proposed. ANE indicated that it is appropriate for variances between the MFP and FT rates to flow into FT tolls, since the service is limited to five years, is based on approved and estimated FT tolls, and may increase FT demand. Ontario suggested too little was known of the at-risk MFP concept introduced in cross-examination.

IGUA indicated that although it supports the concept of a firm service that gives shippers the option to fix their tolls for a defined period, TransCanada provided so few details on its proposal that it was "meaningless". Centra and Tenaska expressed concern with the risk that FT shippers

would shoulder, of MFP tolls being lower than actual FT tolls. Additionally, CAPP and Centra both indicated that if MFP is offered, it should be available to all customers.

MAS opposed the proposed MFP service on the basis that TransCanada failed to provide sufficient evidence to demonstrate that it would improve the long-term sustainability of the Mainline.

Talisman indicated that, as a significant Marcellus producer with an interest in becoming a shipper on the Eastern Triangle, the maximum MFP term of five years was five years too short. The Mainline requires a ten-year contract to underpin any new facilities construction, and Mainline toll uncertainty is a significant concern when contemplating such a contract. Talisman argued that this is depriving the Mainline of new billing determinants, and suggested that intervenors provided limited comments regarding the MFP proposal because the service would not be frequently used.

Québec argued that the MFP service is a potentially attractive option for users that value rate predictability. However, since the proposal lacked detail, Québec supported the MFP service on the condition that the Board closely monitor it for necessary adjustments. Québec also proposed that in light of recent rate volatility, MFP blocks be initially limited to three-year terms.

TransCanada's Reply

TransCanada countered suggestions that its proposal lacked detail by pointing to its various pieces of evidence that provided the particulars of the MFP service. In response to concerns related to the risk FT shippers would bear, TransCanada emphasized that having flexibility to choose the paths on which to offer MFP would help ensure that when offered, MFP would result in incremental billing determinants by retaining existing or attracting new shippers.

Views of the Board

We note that throughout the proceeding, we heard that toll uncertainty and instability was of significant concern to shippers or would-be shippers. On that basis, the concept of a service that provides multi-year toll stability is attractive. We were not persuaded by suggestions that TransCanada provided insufficient detail in its MFP proposal. We were able to adequately examine the merits of the proposal, based on the original evidence, which included a proposed black-lined Mainline tariff, and the additional information provided in responses to information requests and in cross-examination.

We acknowledge concerns about FT shippers bearing the risk of MFP tolls being set too low and about the service not attracting incremental billing determinants. However, as in Section 8.1, we find that the multi-year fixed tolls and the incentive mechanism that we are implementing will ensure that TransCanada has significant accountability and incentives to appropriately exercise the discretion that would accompany the MFP service.

We are not persuaded that when TransCanada offers MFP service, it should have to offer it on all paths. We are concerned that such a requirement could mean that TransCanada would not offer as many MFP blocks, thereby depriving all parties the opportunity to benefit from incremental billing determinants. Given the Mainline's current challenges, we find that it is appropriate to enable TransCanada to compete for business with services tailored to the market realities of the Mainline's many diverse paths.

Based on the above, we have decided to approve the MFP service, although we note that, particularly in the very near-term, the MFP service may be of limited relevance, given that we are approving multi-year fixed tolls, as described in Section 12.2. With respect to the idea introduced in cross-examination of an MFP service where TransCanada accepts the principal risk, we have decided not to approve that version of an MFP service at this time, as the proposal lacked detail, it had limited support from intervenors, and TransCanada chose not to amend its original proposal.

Decision

We approve the creation of the MFP service, as proposed by TransCanada.

8.6 Risk Alleviation Mechanism

The Risk Alleviation Mechanism (RAM) allows a shipper that does not utilize its full contracted volumes on a qualifying contract in a given month to use the unused portion to generate dollar credits. Those credits are then applied against the shipper's IT service invoice for that month, absent the commodity charge. This facilitates the shipper's ability to mitigate Unutilized Demand Charges (UDCs) associated with not utilizing the full contract demand regardless of the paths used for IT service and when the IT service was used within that month.

TransCanada introduced RAM as a pilot project in 2004 and subsequently extended and modified RAM; RAM became a permanent service feature in 2009. RAM is available on the following firm service contracts: long-haul FT contracts; short-haul FT contracts linked to a long-haul FT contract at a common location (that is, the short-haul FT contract is an extension of a long-haul FT contract held by the same shipper); and STS and STS-L contracts.

Views of TransCanada

TransCanada proposed to eliminate the RAM feature, effective 90 days from the beginning of the month following this Decision. TransCanada stated that RAM was originally developed and implemented as a marketing tool to sell additional long-haul FT service. TransCanada indicated that RAM has not worked as originally intended, because rather than increasing FT, the level of long-haul FT contracts has declined since 2005. TransCanada suggested that if a service or service feature becomes detrimental to the pipeline's long-term economic viability or to shippers as a whole, the pipeline should have the ability to eliminate that service or service feature.

TransCanada submitted that the Discretionary Miscellaneous Revenue (DMR) generated by the Mainline, which includes revenue from IT net of RAM credits, is at a sub-optimal level due to the availability of RAM credits. TransCanada stated that RAM credits are cannibalizing IT revenues, seen by the fact that over 90 per cent of gross IT service revenue in 2010 was offset by RAM credits.

TransCanada indicated that the elimination of RAM is consistent with the cost-based/user-pay principle. Maintaining RAM would distort the price of FT because RAM in effect bundles FT service with IT service. TransCanada pointed out that the FT toll charged to a shipper that does not generate RAM credits, such as shippers with high load factors, effectively includes the cost to the Mainline of RAM credits used by other FT shippers. TransCanada showed that while the top five RAM credit users in 2010 accounted for over half of the RAM credits used on the Mainline, the same five users represented only approximately seven per cent of the amount of RAM-eligible firm contracts.

TransCanada acknowledged that RAM increases the number of secondary market transactions. TransCanada indicated that the secondary market includes transactions where shippers assign or release capacity in private market transactions, an area that is not regulated by the Board, and that some would extend the definition of the secondary market to include non-firm service offered by the pipeline. TransCanada estimated that using internal models, with RAM eliminated, that there would be a reduction in average annual Mainline western receipts of 360 million cubic feet per day (10.2 $10^6 m^3/d$) compared to the RAM available scenario. However, TransCanada contended that this increased number of secondary market transactions comes at the expense of the primary market, where TransCanada must focus in order to remain economically viable over the long term. TransCanada also explained that the secondary market is currently poorly structured and distorted because TransCanada is constrained from flexibly pricing IT and because most IT volumes are flowing under RAM credits.

TransCanada also addressed concerns raised by intervenors that eliminating RAM would reduce the NIT price. TransCanada observed that eliminating RAM, all else being equal, would tend to lower the NIT price and therefore widen the price differential between NIT and Dawn. However, TransCanada argued that, within the context of the whole of the Restructuring Proposal (including the elimination of RAM), the TransCanada and Wood Mackenzie models demonstrated the net impact would be an increase in the NIT price.

TransCanada estimated that eliminating RAM would increase discretionary revenues by $50 million to $150 million in 2012 and 2013. These estimates were based on historical analyses of IT and STFT purchases with and without RAM credits. TransCanada used the low end of the range in calculating the 2012 and 2013 net revenue requirement and tolls.

TransCanada further indicated that even without RAM, firm shippers would continue to have a number of ways to mitigate the impact of their UDCs, which are generated when shippers do not ship all of their contracted volumes. Currently, shippers make use of IT purchased using RAM credits to mitigate UDCs. The elimination of RAM would not restrict or reduce the assignment, diversion and alternate receipt rights that shippers have to mitigate UDCs or to participate in the secondary market.

Views of Intervenors

ANE

ANE supported the elimination of RAM. ANE suggested that RAM had not met its intended goal of encouraging FT contracting and instead had the opposite effect by contributing to FT toll increases because it resulted in an overall loss to system revenues.

ANE argued that RAM may have some benefits to FT contract holders, but that to the Mainline, there are only negative impacts on system revenues and toll stability. ANE also emphasized that RAM has been ineffective at preventing the decline in FT contracts. ANE suggested that comparing the $50 million in DMR gain with the $400 million in lost IT credits generated by RAM is a flawed comparison of the financial impact of eliminating RAM.

BP

BP submitted that the default date for any service or pricing related change on the Mainline, including the elimination of RAM, should be November 2013 in order to prevent mid-year contract changes.

Centra

Centra opposed the elimination of RAM. Centra suggested that in order for TransCanada to attract more FT volumes onto the Mainline, FT services should have more attributes and flexibility, not less, and that means maintaining RAM. Centra argued that it is not appropriate to characterize RAM as a free service. Instead, volumes that flow using RAM credits have already been paid for by FT shippers at the full FT toll.

Centra explained that it uses RAM to mitigate large swings in load and Centra's lack of access to local storage. Centra explained that diversions, which require the release of gas within the day, are of limited value in mitigating Centra's UDCs. If RAM were eliminated, Centra stated that it would execute diversions and releases of its FT capacity; however, these other measures would be less effective and more operationally challenging than RAM. Centra also stated that it would re-evaluate its firm contract demand on the Mainline if RAM were not available.

MAS

MAS opposed the elimination of RAM and maintained RAM in its Alternate Proposal for the Mainline for 2012 to 2014. MAS stated retaining RAM is more important now than ever to provide Mainline shippers market and service stability. MAS suggested the elimination of RAM would undermine the ability of the Mainline to obtain additional long-haul billing determinants, because this would reduce the value of FT service.

MAS submitted that RAM is a unique tool to mitigate UDCs, and differentiates the Mainline from other pipelines. Further, eliminating RAM would result in an outcome contrary to

TransCanada's objective of providing greater toll certainty, stability and competitiveness for Mainline shippers.

MAS indicated that RAM facilitates an effective secondary market, and increases purchases of WCSB supply to serve eastern markets. RAM credits allow WCSB supplies to flow even when the basis differential is less than the cost of the IT toll. MAS suggested that gas currently flowing under RAM credits is more likely to be replaced with gas from sources other than the WCSB, rather than result in an increase in IT revenues for the Mainline, as projected by TransCanada.

MAS submitted the relatively small revenue gain that TransCanada forecasts from eliminating RAM is a poor trade-off relative to the amount of RAM credits generated by FT shippers.

Union

Union argued that to serve the seasonal northern Ontario franchise load, RAM is required to mitigate the costs of excess capacity at non-peak times and that eliminating RAM would increase the net cost of gas used by northern Ontario customers. Union argued that, as a result, eliminating RAM may trigger further loss of long-haul contracts and will increase the net cost for remaining long-haul shippers. Union suggested that these impacts are not consistent with fair and reasonable long-haul tolls and are not consistent with the public interest.

Tenaska

Tenaska proposed to keep and extend the availability of RAM. Tenaska stated that eliminating RAM would decrease the value, and increase the cost, of FT service for FT shippers and create an incentive for shippers to find alternatives to the Mainline. Tenaska stated that the availability of RAM, in conjunction with toll stability and toll levels, are the key factors in its Mainline contracting decisions. Tenaska argued eliminating RAM would eliminate asset management activity on the Mainline, and that if it were eliminated, the effective date should be 1 November 2013 to allow current contracts to expire naturally. Eliminating RAM prior to that date could create winners and losers on a large scale.

Tenaska submitted RAM does not change the basic bargain between the pipeline and its firm shippers. Even with RAM in place, FT shippers cannot use any more capacity than what they pay for in their FT contracts, and TransCanada is paid for every unit of capacity used to provide FT service. Tenaska suggested that TransCanada should at least have to show that the tariff without RAM is more just and reasonable than the tariff with RAM.

Tenaska argued that TransCanada's evidence did not consider the negative impact of eliminating RAM. Tenaska suggested the impact of eliminating RAM should include a consideration of market efficiency, competition, gas flows, market prices and delivered gas costs. Although Tenaska acknowledged that market outcomes should not be the Board's primary concern, Tenaska argued that competitive secondary markets result in efficient outcomes, which is positive from a public interest perspective.

In addition, Tenaska asserted that RAM generates efficient market outcomes because RAM allows gas to flow in the secondary market to where it has the most value, even when the difference in value is smaller than the normal IT bid floor, which is the FT toll. Tenaska explained that RAM effectively discounts the cost of transportation on the Empress to Emerson path, which increases demand for gas in the WCSB, increases NIT prices and lowers market prices for gas purchased at market.

Tenaska argued the Mainline's long-run goal should be to compete for the business of discretionary shippers and, in order to do that, it must offer better and cheaper discretionary services. With RAM, Tenaska observed the Mainline's FT service is at least comparable to FT service on other pipelines. Tenaska argued RAM is almost uniquely necessary and appropriate on the Mainline given the geographic market distribution of the system. For example, most of the captive markets with FT service are in the east and the only remaining viable discretionary secondary market is upstream at Emerson. Tenaska suggested that other UDC mitigation measures, such as diversion and secondary receipt and delivery points, are ineffective with a geographic distribution such as that observed on the Mainline. RAM, on the contrary, allows FT shippers to access upstream delivery points, like Emerson.

Tenaska agreed that eliminating RAM would make sense if, on a net aggregate basis, RAM would result in a loss to stakeholders. However, Tenaska suggested that RAM creates a net benefit to Mainline stakeholders and society as a whole. Tenaska observed that RAM generates a large amount of asset management and asset optimization activity on the system and the value created by RAM arises under private arrangements and varies under different market conditions. The value Tenaska derives from RAM is only part of the total value. Tenaska estimated that, when it held FT contracts between 2004 and 2008, RAM provided Tenaska a value of $0.10 to $0.40/GJ. Since 2008, Tenaska has been a party to various asset management arrangements with Mainline FT shippers; in those cases, Tenaska estimated the value of RAM to be $0.10 to $0.95/GJ.

Tenaska stated that TransCanada has overstated the potential net DMR gain from eliminating RAM and it should instead fall between a range of zero and $150 million. Tenaska also indicated that the elimination of RAM may reduce overall Mainline revenue by lowering the value of FT service and potentially inducing shippers to find alternatives to long-haul Mainline capacity. Tenaska observed that in general, flexibility comes at a cost to a pipeline, and eliminating flexibility can result in revenue increases and corresponding FT toll decreases. However, Tenaska insisted that flexibility measures are a minor cost relative to the value they provide to shippers and the benefits they provide in the form of facilitating efficient competitive market outcomes.

Rather than eliminating RAM, Tenaska proposed extending the availability of RAM credits and diversions to all short-haul FT contracts and all STFT. Tenaska submitted these proposals would make the Mainline more competitive, attract incremental throughput and revenue to the system, and align the Mainline's STFT services more closely with the flexible short-term services offered by the Mainline's U.S. competitors. Tenaska indicated the restrictions on the service features for STFT contracts relative to FT contracts do not appear to serve any regulatory or fairness-related purpose in the current market and should be eliminated as a matter of principle. Tenaska explained that its proposal to extend RAM to STFT would help reduce risk, and create new opportunities and incentives for short-term shippers who do not require FT service.

TransGas

TransGas supported maintaining RAM, stating that the benefits to the Mainline of eliminating RAM are uncertain and do not warrant FT shippers losing the benefits of RAM.

Ontario

Ontario opposed the elimination of RAM for the 2013 Test Year. Ontario argued that eastern shippers continue to see value in RAM and its intended purpose of encouraging and maintaining shipper interest in entering into FT contracts.

Québec

Québec argued that the usage of RAM credits by some shippers is not tenable for the Mainline. However, Québec disagreed with TransCanada's solution of eliminating RAM. Rather, Québec suggested that it would prefer to adjust the criteria for using RAM credits.

TransCanada's Reply

TransCanada argued that shippers would continue to have numerous ways to mitigate their UDCs if RAM were eliminated. However, TransCanada emphasized that these mitigation tools do not have the negative impact on DMR that RAM does. Some of these tools, such as diversion to a downstream delivery point, actually generate incremental revenue for the Mainline. TransCanada suggested that because FT shippers would increase their use of the other mitigation tools after RAM is eliminated, it would be incorrect to suggest that FT shippers would suffer a net loss valued at the difference between the recent annual RAM credits of approximately $400 million and the potential $50 million gain in annual Mainline DMR from eliminating RAM.

TransCanada asserted that RAM is tantamount to mandatory discounting of IT services but does not generate benefits to the system. TransCanada suggested if the Mainline were permitted to offer discounts, then such discounts should be more direct and transparent and the benefits of such discounting could be fully applied to lowering Mainline FT tolls.

TransCanada opposed Tenaska's proposal to extend RAM to STFT and short-haul FT service. An extension of RAM would increase current concerns associated with RAM and not encourage long-haul contracting. TransCanada also opposed Tenaska's proposal to extend other flexibility measures such as diversions to STFT service, because STFT is designed to meet specific short-term needs and hence should not include these flexibility features.

Views of the Board

We find that RAM generates significant value to those who use it. However, we are guided by our view that shippers with low utilization rates who truly require guaranteed access to the Mainline, should pay for the full year's reasonable cost of the capacity they contract. We find there is no reason why such a shipper should have the right to reduce the effective amount they pay for their contracted capacity through RAM.

In our view, there is merit in structuring FT service such that when a shipper contracts for FT service, the shipper is, by and large, paying for guaranteed capacity when it is needed. RAM provides a significant distortion in this respect, as it offers an additional, essentially unrelated, service attribute that has significant value for some shippers but little or no value for others, depending mainly on a shipper's load factors. The other available tools for mitigating UDCs create far less distortion.

In this Decision, we are giving the Mainline significant flexibility to optimize IT revenues. Keeping RAM would significantly hinder the effectiveness of this flexibility. We also note that with the new discretionary pricing flexibility, TransCanada will have the ability to discount IT to levels below the FT rate. This means that some of the volumes currently flowing under RAM that would not flow if the minimum IT bid floor were 100 per cent of the FT rate, may continue to flow.

We find that the evidence clearly demonstrates that eliminating RAM will lead to higher net DMR, which all else equal, should contribute to lower FT tolls over time, which is of paramount importance in these circumstances. We expect this will offset the potential reduction in long-haul FT contracting caused by the fact that RAM provides value to some long-haul FT shippers.

In our view, the merits of eliminating RAM far outweigh the ancillary benefits that RAM creates in the marketplace as a result of it leading to increased Mainline flows and associated impacts on market prices. Based on all of these factors, we find that in the current circumstances it is appropriate to eliminate RAM.

With respect to the timing of implementing this decision, we find there is no compelling justification to delay the elimination of RAM beyond TransCanada's proposal of 90 days from the beginning of the month following the release of this Decision. While the elimination of RAM could impact shippers with active long-haul FT contracts and parties to other private transactions, all affected parties have had every opportunity to be aware of the potential elimination of RAM. TransCanada filed its Application on 1 September 2011 and the RAM issue received significant attention throughout the proceeding. Therefore, parties have had ample time to take appropriate action to mitigate any impacts of this decision, if they deemed such action necessary. Accordingly, delaying the elimination of RAM would unnecessarily delay any resulting system-wide benefits.

Finally, we are of the view that it is essential that the Mainline continues to innovate and experiment with new services and service features to provide value for both shippers and the pipeline. However, if upon implementation, or under new prevailing circumstances, it is determined that these innovative services or service features become or turn out to be detrimental to the Mainline, they may need to be eliminated. In the case of RAM, it was implemented to promote the renewal of, and incremental contracting for, long-haul FT service. However, as described in Chapter 2, since RAM was introduced, long-haul FT contracting has fallen considerably, and there is now significant excess capacity. The Mainline must be allowed to adapt its services and service features when circumstances change.

Decision

RAM shall be eliminated, effective 90 days from the beginning of the month following the release of this Decision.

8.7 Proposed Elimination of Services

TransCanada proposed to eliminate Long-Term Winter Firm Service (LT-WFS) and Firm Service Tendered (FST). The Board approved a limited quantity of LT-WFS capacity in its RH-3-94 Decision and the last LT-WFS contract expired on 31 March 2005. TransCanada submitted that the Board addressed the conversion of FST service to FT service in its RH-1-97 Decision and the last FST contract was converted to FT service on 31 October 2000.

Views of the Board

Since LT-WFS and FST have not been used in many years and there are no remaining contracts under either service, we find it appropriate to eliminate these services.

Decision

We approve the elimination of LT-WFS and FST.

8.8 Bi-directional Service and Nomination Windows

Bi-directional Service

MAS proposed that TransCanada develop and offer a firm bi-directional service. MAS submitted that TransCanada should be aware that the bulk of its revenue requirement is recovered over markets served by local distribution companies, including MAS members. Accordingly, TransCanada should offer services that are responsive to these shippers' needs. MAS believe that TransCanada should explore any means that may enable it to enhance the value and competitiveness of contracting on the TransCanada system. By offering competitively priced and valued services that respond to the market's needs, TransCanada would be better able to adapt to the ever-evolving marketplace for natural gas supply, demand and transportation.

MAS submitted that local distribution companies have previously requested that TransCanada introduce a bi-directional service for short-haul transportation in order to facilitate their load balancing requirements. The principle characteristics of this service would be:

- standalone service that allows a shipper to transport its contract quantity to/from a designated receipt/delivery point or area;
- minimum contract term of one year for existing capacity;
- renewable on an annual basis with six months renewal notice;
- eight nomination windows; and
- priced at a 10 per cent premium to the FT toll.

MAS submitted that the proposed firm bi-directional service would address a gap in the services currently offered on the Mainline. MAS noted that while STS and FT-SN provide some nomination flexibility, neither provides shippers with firm bi-directional capability. In addition, STS is only available if tied to a FT contract. Currently, to achieve firm bi-directional service a shipper is required to maintain two separate FT contracts: one from point A to point B and another from point B to point A, thus, the shipper has to pay twice for the same path, which MAS concluded is not competitive.

MAS indicated the ability to transport natural gas bi-directionally on a firm annual or firm seasonal basis would allow MAS members to use their Mainline contracts more effectively to move natural gas from their supply source to their market area and/or storage.

Views of TransCanada

TransCanada testified that it must be able to change products and services more quickly and should be free to develop services and price them to attract incremental volumes or to keep existing volumes on the system.

TransCanada submitted that a bi-directional service is not necessary at this time. It contended that the existing Mainline suite of services is responsive to the balancing requirements of the market and provides for a wide variety of service options including:

- STS;
- STS-L, a service similar to STS intended for the unbundled local distribution company environment;
- allowing receipts from DDAs for IT and STFT services; and
- FT-SN and ST-SN services, which offer additional nomination window flexibility and a reservation of capacity feature to assist in managing large and volatile loads, subsequently reducing exposure to balancing fees.

TransCanada suggested MAS has not assessed the possible impacts their proposed bi-directional service may have on other services, but that MAS acknowledged their proposed bi-directional service contracts will likely displace some part of their contracting for FT and STS requirements. TransCanada noted the proposed toll for bi-directional service would represent less than five per cent of the cumulative toll associated with long-haul FT and STS services, which highlights the potential for revenue losses associated with the proposed bi-directional service. TransCanada submitted the issue is not one of availability of service or ability to achieve the purpose of the service, but rather an apparent intention to convert from currently available service alternatives.

Additional Nomination Windows

Views of Intervenors

MAS also proposed that TransCanada offer additional nomination windows (an increase from four to eight windows) for both firm service and their proposed bi-directional service, because this would enable shippers to better serve their markets. For instance, the STS service currently has eight nomination windows instead of four, which works well for MAS members because it allows them to move gas back and forth to storage throughout the day. MAS recognize that TransCanada currently offers FT-SN service, which has 96 nomination windows. However, MAS indicated this service is offered only to customers that have separate meters at the DDA level.

MAS submitted the introduction of additional nomination windows for FT contracts would greatly enhance TransCanada's service offerings and would not constrain TransCanada's ability to operate the Mainline. Given MAS' load balancing requirements, additional nomination windows for FT contracts would be a service enhancement valued by MAS (and potentially other shippers as well).

Views of TransCanada

TransCanada submitted no party has explained why the current standard four nomination windows used by the majority of North American natural gas pipelines would not be adequate to meet the needs of Mainline shippers. TransCanada asserted that the MAS evidence supporting its proposal was vague and consisted of unsupported assertions. Further, TransCanada suggested MAS did not provide any assessment of the potential impacts of their proposal.

TransCanada noted that additional nomination flexibility is available to Mainline shippers for balancing purposes. TransCanada noted that Gaz Métro, Enbridge and Union have used STS service and its eight nomination windows for many years to help balance their market and storage requirements. TransCanada added that it provides additional nomination window flexibility under FT-SN and ST-SN services with up to 96 nomination windows daily. These services would be available on an open-access basis to any Mainline shipper requiring further nomination flexibility above the standard four nomination windows, subject to the requirements specified in the Mainline tariff.

TransCanada requested that the proposal for additional nomination windows be dismissed, as MAS did not demonstrate a requirement for additional nomination windows. TransCanada submitted the Mainline suite of services includes services that provide additional nomination windows for those shippers interested in such flexibility.

Views of the Board

We agree with TransCanada that the existing Mainline suite of services is responsive to the balancing requirements of the market and provides for a wide variety of service options. However, we recognize that some shippers, like MAS, have indicated the

existing services do not meet their needs. We heard conflicting evidence from TransCanada with respect to the bi-directional service - that it is not needed at this time; and, that it is not opposed to offering a bi-directional service, but it needs to determine the appropriate price. We find that TransCanada is in the best position to assess the impacts of proposed services on pipeline operations.

We believe TransCanada should be able to quickly develop services and price them to attract incremental volumes, having regard to the optimal use of the system as a whole. We find that insufficient evidence was presented to persuade us that a bi-directional service is required at this time. Accordingly, we are not prepared to direct TransCanada to provide a bi-directional service at this time; therefore, we do not find it necessary to comment on the appropriate price of the service, or the number of nomination windows for bi-directional service.

With respect to MAS' request that the nomination windows available for firm service be increased from four to eight, we were not persuaded that additional nomination windows are required for firm service. In our view, the current standard four nomination windows used by the majority of North American natural gas pipelines remains adequate to meet the needs of Mainline shippers. We find the evidence did not demonstrate that any hardship would be caused by maintaining the current standard four nomination windows for firm service. In our view, the eight nomination windows available for STS service is sufficient and has worked very well over the years to allow local distribution companies to address their load balancing requirements. We find that it would be more effective to address the load balancing requirements of local distribution companies by offering specific services, as opposed to increasing the nomination windows for firm service.

Decision

We deny requests for a firm bi-directional service and the requested increase from four to eight nomination windows for all firm services.

8.9 Seasonal Firm Service with Renewal Rights

Centra submitted that a seasonal firm service with renewal rights would provide it with the flexibility to shape its load in a cost effective and reliable manner. In addition, it would provide TransCanada with assurance of revenues for a full season, particularly since Centra would be prepared to consider a longer than one-year term for a long-term winter firm service with renewal rights. Centra would expect that a reasonable premium would be associated with a seasonal firm service.

Views of TransCanada

TransCanada submitted it is not clear whether Centra is proposing such a service or is simply informing the Board and parties of its interest in such a service. Regardless, TransCanada did not support the implementation of a seasonal firm service with renewal rights. According to

TransCanada, Centra did not provide any assessment of the possible impacts such a service would have on Mainline contracting and the extent to which it could negatively impact the revenue generating capability of the Mainline.

TransCanada was concerned that a separate seasonal firm service with renewal rights could promote migration away from FT and STS and result in lost billing determinants. Further, TransCanada did not believe that a 10 per cent premium above the FT toll would be appropriate for a service that could be used on a renewable basis in the most valuable months of a year, as this would effectively prevent FT capacity from being sold on an annual basis, and contribute little to the annual cost of providing service in the peak period.

Views of the Board

We share TransCanada's concern that seasonal firm service with renewal rights could prevent FT capacity from being sold on an annual basis. Therefore, we do not approve a seasonal firm service with renewal rights.

Decision

We deny the request for a seasonal firm service with renewal rights.

Chapter 9

Mainline Fair Return and Business Risk

When tolls are determined pursuant to a cost-of-service methodology, the regulator is required to determine a fair return to be applied to the investment made by the regulated company. This fair return will determine, to a large extent, the earnings from regulated operations. Based on judicial and regulatory decisions, the return allowed to a regulated company needs to comply with the Fair Return Standard.

This chapter presents the business risk assessment for the Mainline and the determination of a fair return pursuant to the Fair Return Standard. First, the Fair Return Standard is presented in Section 9.1, which is followed by the business risk assessment in Section 9.2. Submissions regarding samples of comparable companies for the Mainline are analyzed in Section 9.3 and the methodologies used to estimate the cost of capital are assessed in Section 9.4.

Finally, the evidence submitted on the recommended return for the Mainline is considered in Section 9.5 to determine a fair return.

9.1 Fair Return Standard

The Fair Return Standard establishes the requirements that must be met by the return allowed to the utility. The Fair Return Standard requires that a return:

- be comparable to the return available from the application of the invested capital to other enterprises of like risk (comparable investment requirement);
- enable the financial integrity of the regulated enterprise to be maintained (financial integrity requirement); and
- permit incremental capital to be attracted to the enterprise on reasonable terms and conditions (capital attraction requirement).

In determining a utility's allowed return, the Board can only consider the company's cost of capital; the impact of any resulting toll increase on customers is an irrelevant consideration in that determination. Parties in this proceeding did not dispute the Fair Return Standard, which is well established by case law[62] and set out in previous Board decisions.[63] While individual components of the overall return (ROE, capital structure and cost of debt) need to be found reasonable, the Fair Return Standard needs to be applied to the overall return allowed to the company.

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[62] *Northwestern Utilities Limited v. City of Edmonton*, [1929] S.C.R. 186; *TransCanada PipeLines Ltd. v. Canada (National Energy Board)*, [2004] F.C.J. No. 654, 2004 FCA 149; *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia et. al.*, 262 U.S. 679 (1923); *Federal Power Commission v. Hope Natural Gas Co.*

[63] RH-2-2004 Phase II; National Energy Board, RH-1-2008, Reasons for Decision, Trans Québec & Maritimes Pipelines Inc. Cost of Capital, March 2009.

9.2 Business Risk

In determining a fair return for the Mainline, an assessment of business risk is required for two purposes. It is required to identify firms facing comparable risk and to assess the changes to the Mainline's business risk since it was last considered by the Board in 2004 during the RH-2-2004 Phase II proceeding. In this Decision, the assessment of business risk is divided in broad categories of supply risk, market risk, competitive risk and regulatory risk.[64] While the assessment was divided in those categories to help structure the analysis, those categories are inextricably linked, sometimes overlap and the boundaries are somewhat subjective. The assessment of any given risk factor is presented only under one category to avoid repetition although parties might have discussed it under a different category or under a different context than a specific assessment of business risk.

9.2.1 Fundamental and Variability Risk

Views of TransCanada

TransCanada considered business risk in two broad categories: fundamental risk and variability risk. Fundamental risks refer to risks that are structural in nature and denote trends in the evolution of the overall risk landscape. These risks include supply, competitive, market, operating and regulatory risks facing the Mainline. Variability risk refers to factors that affect year-to-year earnings for the pipeline. TransCanada was of the view that fundamental risks should be given greater weight than variability risk. In this regard, Dr. Carpenter, an expert witness for TransCanada, stated that the year-to-year variability in the earnings of an equity investment is only a small part of the business risk picture mostly because the time horizon of any equity investment is inherently long term, especially in the case of gas pipelines where investments are sunk and difficult to redeploy. More specifically, Dr. Carpenter submitted that based on his view, approximately 75 per cent should be attributed to fundamental risk and 25 per cent to variability risk. However, Dr. Carpenter noted that the weight applied to each type of risk would be case-specific and would depend on the relative probability, size and timing of the potential impacts arising from the realization of specific risks.

Mr. Engen, an expert witness for TransCanada on capital markets, indicated that apart from the desire to be able to earn a return on and of capital, the market really looks at the cash flow profile and the ability of the asset to generate cash flow on a predictable and stable basis. Mr. Engen stated that such characteristics are highly desirable in the marketplace.

Views of Intervenors

Tenaska was of the view that there was no basis for Dr. Carpenter's assertion about fundamental risk being more important than variability risk. Accordingly, Tenaska stated that no weight should be given to this assertion. Based on the testimony of Mr. Engen, Tenaska submitted that investors are more concerned about variability risk because the most important considerations for investors are predictable and stable cash flows, hence low variability risk.

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[64] Operational risk can also be considered an aspect of business risk but no submissions were received in this proceeding on this particular topic.

9.2.2 General Business Risk

Views of TransCanada

TransCanada submitted that there had been a substantial and unexpected change in the competitive landscape of the North American natural gas market since the last time the Board evaluated the business risk of the Mainline for cost of capital purposes during the RH-2-2004 Phase II proceeding.

TransCanada summarized the changes in the business environment since 2004 in the following points:

- Mainline western receipts have fallen from 7.1 Bcf/d (201.1 $10^6m^3/d$) in 1999 to 6.0 Bcf/d (170.0 $10^6m^3/d$) in 2004 to 3.2 Bcf/d (90.6 $10^6m^3/d$) in 2011.

- 2004 WCSB supply forecast for 2010 was over 16.7 Bcf/d (473.1 $10^6m^3/d$), whereas actual 2010 supply was 14.3 Bcf/d (405.1 $10^6m^3/d$).

- Natural gas supplies being developed in the Mainline's market areas (for example, the Marcellus play) were not contemplated in 2004. Marcellus supply is currently forecast to grow from approximately 4.5 Bcf/d (127.5 $10^6m^3/d$) in 2012 to close to 8.5 Bcf/d (240.1 $10^6m^3/d$) by 2020.

- Mainline exports to the U.S. northeast declined from the range of 2.0 Bcf/d (56.7 $10^6m^3/d$) to 2.5 Bcf/d (70.8 $10^6m^3/d$) in 2007 to as low as 0.5 Bcf/d (14.2 $10^6m^3/d$) in 2010.

- Mainline long-haul long-term contracts (contracts with a term greater than 1 year) have declined from approximately 5.0 Bcf/d (141.6 $10^6m^3/d$) in 2004 to 1.3 Bcf/d (36.8 $10^6m^3/d$) in 2011.

- Actual 2010 demand in eastern Canada and U.S. northeast markets was 0.7 Bcf/d (19.8 $10^6m^3/d$) less than forecast in 2004. TransCanada's forecast for 2020 is 1.8 Bcf/d (51.0 $10^6m^3/d$) lower than its 2004 forecast.

TransCanada concluded that the Mainline's business risk has increased substantially since 2004, such that the Mainline can no longer be considered a low-risk pipeline.

TransCanada summarized that the Mainline faces intense competition in eastern Canadian and U.S. northeast markets from new sources of supply, as well as competition for supply in the WCSB. Furthermore, TransCanada submitted that the Mainline faces higher market risk, as its markets are smaller than expected and forecast growth rates are lower than expected. Supply risk has declined due to the development of new unconventional shale gas reserves but remains high due to a decline in conventional WCSB supply. Overall, TransCanada submitted that because of intense competition for supply and market, there has been a major increase in the Mainline's competitive risk, and therefore, the Mainline's overall business risk.

Due to the fact that the Restructuring Proposal reduces tolls (relative to the Status Quo scenario) on various parts of the Mainline system, TransCanada submitted that implementation of the Restructuring Proposal reduces the competitive risk that the Mainline is facing. Ultimately TransCanada concluded that the Mainline's competitive risk and overall business risk would be lower if the Restructuring Proposal were implemented than would otherwise be under the Status Quo, but still significantly higher than when the Mainline fair return was last determined by the Board, in 2004. TransCanada submitted if the Status Quo were maintained, an increased return would be required by investors because of a lack of mitigation of competitive risk currently facing the Mainline.

Views of Intervenors

CAPP

Mr. Johnson, one of CAPP's expert witnesses, submitted that overall the Mainline's business risk is somewhat higher than in 2004, particularly with respect to markets and competition. Dr. Booth, another of CAPP's expert witnesses, submitted that the Mainline's business risk had increased since the RH-2-2004 Phase II proceeding, but was lower than in the Board's assessment of TQM's business risk during the RH-1-2008 proceeding. Dr. Booth submitted this is because the WCSB supply is forecast to be healthier than expected earlier and the throughput forecast for the Mainline for 2020 is better than at the time of either RH-2-2004 or RH-1-2001.[65]

Ontario

Ontario submitted that the increase in competitive and market risks are partially offset by the constant or declining supply risk, operating risk and regulatory risk. On balance, Ontario submitted it believes that the business risk facing the Mainline has increased slightly since 2004 and is in line with that proposed by CAPP.

TransCanada's Reply

Dr. Carpenter submitted that Dr. Booth's assessment of the Mainline's business risk was incomplete, because Dr. Booth failed to follow the framework of reviewing each component of business risk and missed key elements of the Mainline's business risk. In particular, Dr. Carpenter alleged that Dr. Booth failed to acknowledge the prospect of LNG exports from B.C. as a critical risk facing the Mainline and the emergence of the Marcellus shale gas play as a source of new competition for the Mainline.

Dr. Carpenter submitted that the evidence of CAPP's expert witnesses, Mr. Johnson and Dr. Booth downplayed the change in business environment of the Mainline and the corresponding effect on business risk. When all risks facing the Mainline are considered, it was the position of Dr. Carpenter that the increase in business risk was more substantial than acknowledged by CAPP.

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[65] National Energy Board, RH-1-2001, Reasons for Decision, TransCanada PipeLines Limited, Tolls and Tariff, November 2001.

Furthermore, Dr. Carpenter submitted that Mr. Johnson's and Dr. Booth's use of TransCanada's Base Case throughput projections in their business risk analysis was misplaced, especially with respect to their suggestion that the Mainline's problems are or may be temporary. Dr. Carpenter suggested that a serious analysis of a pipeline's business risk needs to consider a range of outcomes, and particularly low cases. Dr. Carpenter also highlighted that Dr. Booth's lack of confidence in TransCanada's Throughput Study is not consistent with Dr. Booth's claim that the Mainline is less risky than it was in 2008.

Overall, TransCanada stated that CAPP's comparison of the Mainline's business risk to RH-1-2008 was inappropriate, given that the last time the Board reviewed the Mainline's business risk in the context of the fair return for the Mainline was in 2004.

In Dr. Carpenter's opinion, if the Board were to sanction one of the intervenors' proposals, it would suggest a fundamental change in the Board's regulatory paradigm and would signal a significant change in the business risk borne by investors in the Mainline.

9.2.3 Supply Risk

Supply risk is the risk that the physical availability of competitively priced natural gas volumes could affect TransCanada's income-earning capability.

Views of TransCanada

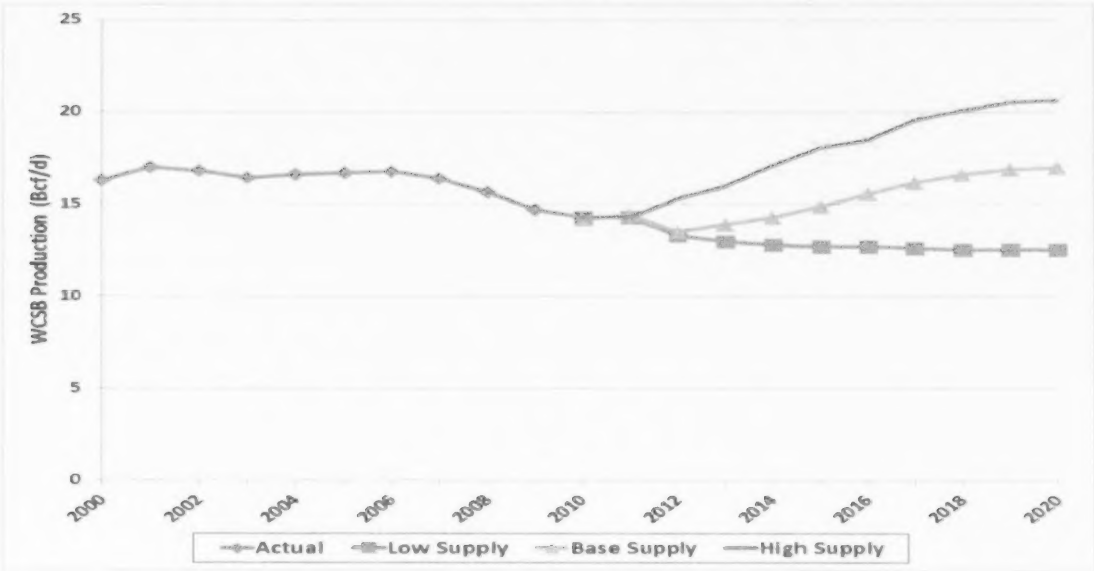
TransCanada stated that recent and dramatic changes in the business environment of natural gas supply, demand and transportation in North America have raised significant issues that affect the long-term economic viability of existing pipeline infrastructure and supply basins.

TransCanada asserted that the overall business risk facing the Mainline has increased since RH-2-2004 Phase II, predominately due to increases in the competitive and market risks it faces. However, TransCanada stated that supply risk has decreased primarily due to the presence of unconventional shale and tight gas in the WCSB.

In 2004, the WCSB was considered a mature basin with overall production in long-term decline. While natural gas from conventional sources is still considered to be in decline, unconventional sources, such as shale and tight gas plays, provide for an increase in overall supply from current levels.

TransCanada's Throughput Study included an assessment of both conventional and unconventional gas in the WCSB, northern gas supply, as well as supply available in the U.S. northeast. Ultimately, TransCanada submitted seven throughput cases using either a low, base or high level of WCSB supply. Figure 9-1 outlines TransCanada's Low, Base and High supply scenarios. While TransCanada updated its Base Case supply to reflect 2012 data, the Low and High cases remained unchanged from the initial Throughput Study.

Figure 9-1 TransCanada's Low, Base and High Supply Cases

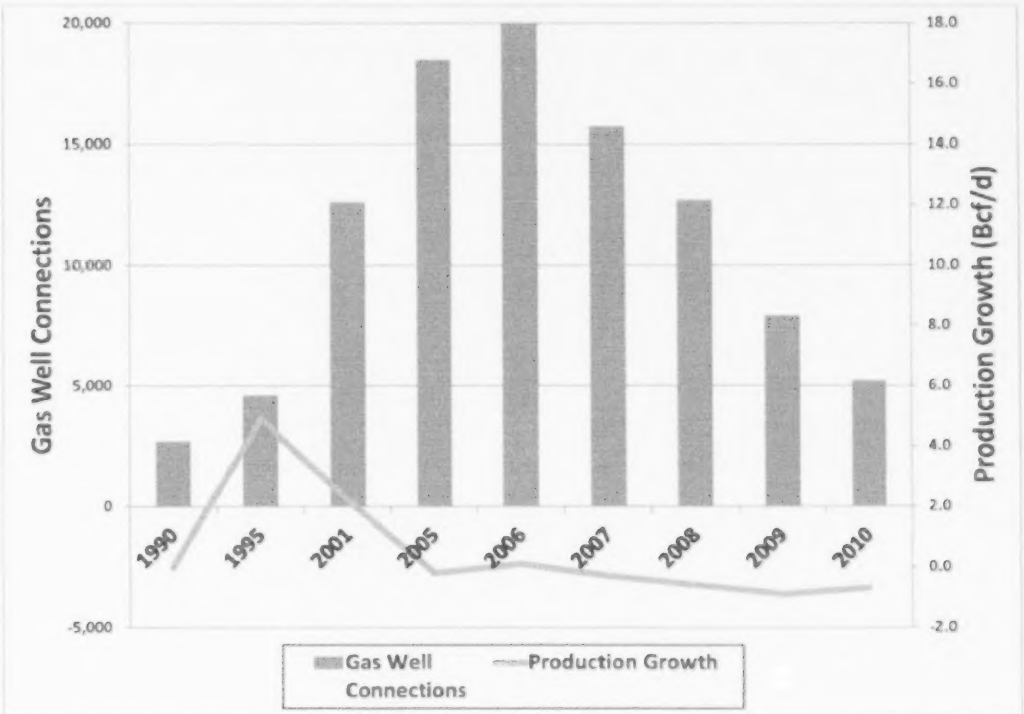


Conventional and Unconventional Supply

TransCanada stated that the supply risk facing the Mainline is highly dependent on the supply performance of the WCSB. Further, TransCanada stated the WCSB is transitioning from a basin with a significant but declining conventional production base to a basin with technology driven, emerging unconventional resource plays that provide future growth potential.

In its Application, TransCanada stated that current WCSB conventional production is significantly lower than what was anticipated in the RH-2-2004 Phase II proceeding. TransCanada expected WCSB conventional supply to remain at approximately 16 Bcf/d (453.2 $10^6 m^3/d$) through 2010. Actual production was far less at approximately 13 Bcf/d (368.3 $10^6 m^3/d$) in 2010, placing it below the Low Case volume forecast in 2004 even though through much of this period, gas prices were relatively high, peaking at $8.30 per thousand cubic feet in 2008. As TransCanada points out in Figure 9-2, the high Alberta Plant Gate prices seen through the middle part of the last decade were not able to add significantly to production from the basin. According to TransCanada, production growth has remained negative through the latter half of the period. This illustrates the mature nature of the WCSB, and the stage of a basin's development where more drilling and a greater reliance on advances in technology is required to maintain production levels from conventional supply sources.

Figure 9-2 Gas Well Connections and Production Growth in the WCSB



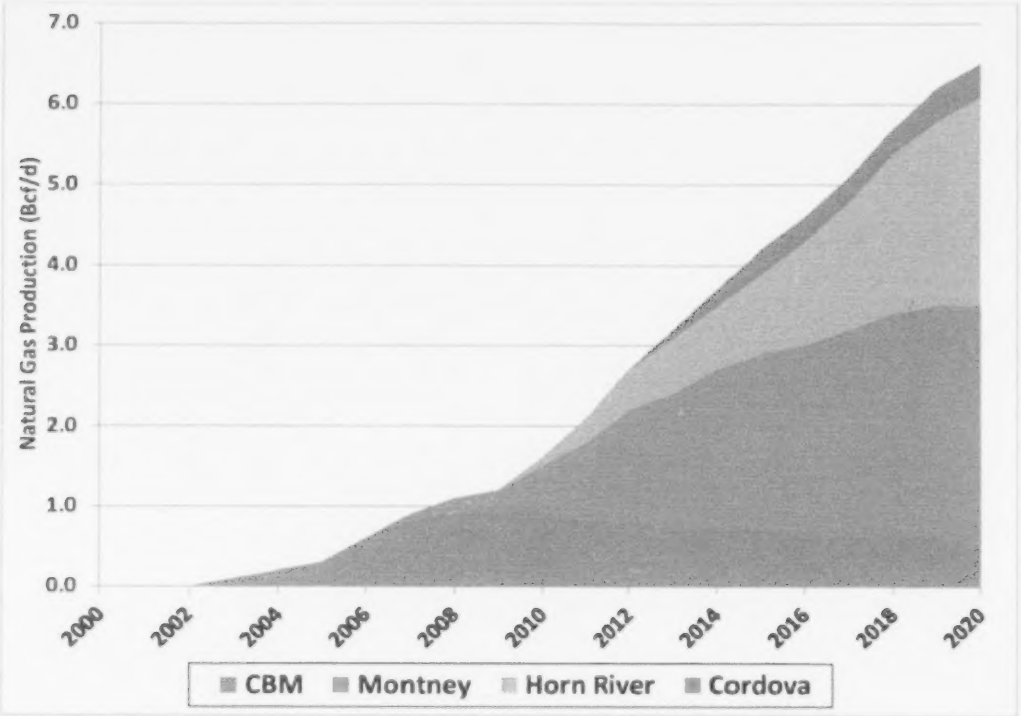
TransCanada estimated there to be 316 trillion cubic feet (Tcf) (8,951.6 10^6m^3) of technically recoverable and 301 Tcf (8,526.7 10^6m^3) of economically recoverable conventional resources remaining in the WCSB.

Though comprising only 2.1 Bcf/d (59.5 $10^6m^3/d$) of total production currently, future growth in supply from the WCSB will come from the unconventional resources. TransCanada assessed production from coal bed methane and the Horn River, Cordova Embayment and Montney plays. In its revised Base Case forecast, TransCanada stated that of the above sources, the largest by 2020 will be the Montney at 3.0 Bcf/d (85.0 $10^6m^3/d$) followed by the Horn River at 2.6 Bcf/d (73.7 $10^6m^3/d$). The Cordova Embayment and coalbed methane will also contribute though to a much smaller extent, 0.5 Bcf/d (14.2 $10^6m^3/d$) and 0.4 Bcf/d (11.3 $10^6m^3/d$) respectively. Figure 9-3 shows the relative proportion of unconventional supply attributed to each assessed source. Table 9-1 shows TransCanada's assessments of unconventional resources used in this Application.

Table 9-1 Unconventional Resource Assessments (Tcf)

Source	Original Gas in Place	Marketable Gas
Horn River Basin	490 (13,881 10^6m^3)	104 (2,946 10^6m^3)
Montney	318 (9,008 10^6m^3)	79 (2,238 10^6m^3)
Cordova Embayment	77 (2,181 10^6m^3)	18 (510 10^6m^3)

Figure 9-3 Production from Unconventional Sources



In addition to the Horn River Basin, Cordova Embayment, and Montney plays, TransCanada also discussed the potential for future supply to be available from the Duvernay play in Alberta. However, given the insufficient data available, no assessment could be made as to the scope and timing of future activity from the play. Consequently, no volumes from the Duvernay were included in either the initial or the revised Throughput Studies.

TransCanada also assessed the potential for northern gas supply from the Mackenzie Delta and Alaska. However, given the uncertainty surrounding these sources no volumes were included in either the initial or the revised Throughput Studies.

Northeastern U.S. Supply

TransCanada cited estimates from the United States Geological Survey pointing to a recoverable resource of approximately 130 Tcf (3,682.6 $10^6 m^3$) of natural gas from the Marcellus shale basin. Production from the Marcellus play is forecast to reach 8.5 Bcf/d (240.8 $10^6 m^3/d$) by 2020. However, TransCanada's expert witness, Dr. Langford, indicated that supply from the Marcellus was not included in the company's assessment of supply risk. Discussion of supply from Marcellus is included in the competitive risk section.

Based on the evidence outlined above, primarily the discovery of shale gas within the WCSB, TransCanada concluded that the Mainline faces lower supply risk today than it did at the time of the RH-2-2004 Phase II proceeding.

Views of Intervenors

No intervenor to this proceeding presented an alternative to TransCanada's supply forecast.

CAPP

CAPP submitted that it accepts TransCanada's Base Case supply forecast as the most likely outcome and that TransCanada alone is in the best position to forecast its own throughput volumes. CAPP submitted that there is a large resource base in the WCSB and prospects for demand in North America are expected to increase. Based on this, CAPP accepted TransCanada's assertion that it can recover long-haul traffic.

Ontario

Ontario agreed with TransCanada that, considering all factors, the level of supply risk facing the Mainline has decreased since the last assessment of Mainline business risk in RH-2-2004 Phase II.

9.2.4 Market Risk

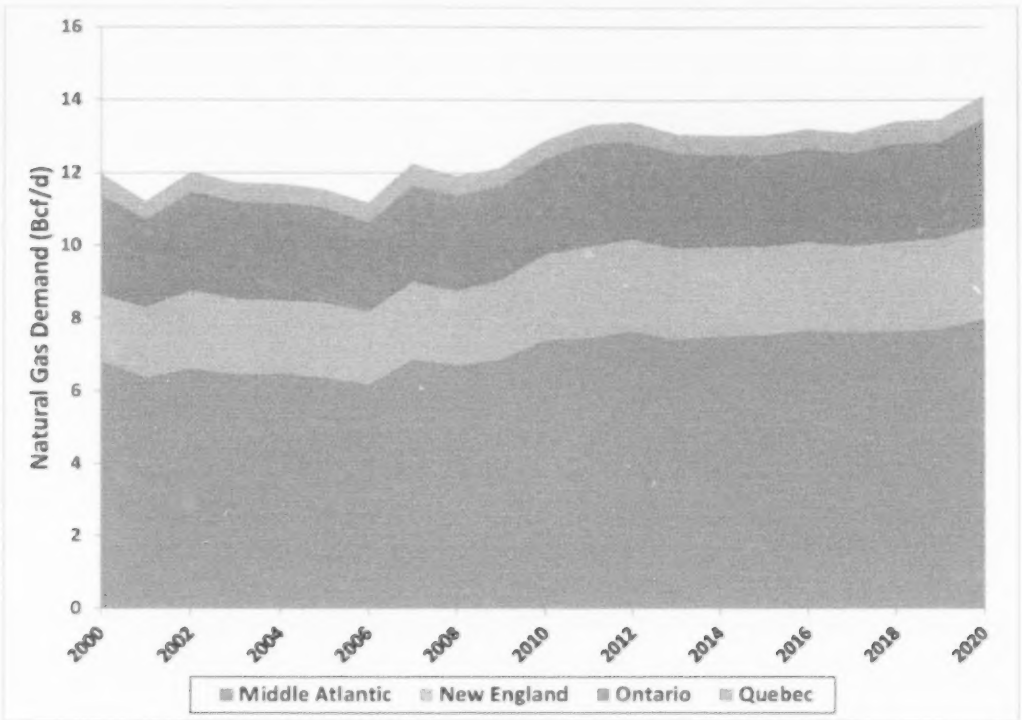
Market risk is the business risk that results from the overall size of the market.

Views of TransCanada

TransCanada took the position that its market risk had increased on the basis that current markets are smaller than expected and that forecast market growth rates are lower than what was expected in RH-2-2004 Phase II, particularly in key market areas. TransCanada attributed the reduction in forecast demand to slower or negative economic growth rates and lower growth rates of gas demand for power generation. Dr. Carpenter further noted that the recession that followed the financial crisis of 2008 could be a reflection of long-term structural problems that are difficult to rectify in the U.S. and global economies, casting considerable uncertainty on the timing of an economic recovery.

In RH-2-2004 Phase II, TransCanada forecast natural gas demand growth in Ontario, Québec and the U.S. northeast of 1.5 per cent per year from 2010 to 2020, and annual demand of 15.6 Bcf/d (441.9 $10^6m^3/d$) in 2020. TransCanada's Throughput Study Base Case illustrated gas demand in these regions rising from 12.9 Bcf/d (365.4 $10^6m^3/d$) in 2010 to 14.0 Bcf/d (396.6 $10^6m^3/d$) in 2020, a growth rate of 0.85 per cent per year. The revised Throughput Study increased demand in these regions to 14.1 Bcf/d (399.4 $10^6m^3/d$) in 2020, a growth rate of 0.92 per cent per year. Figure 9-4 illustrates historical demand and TransCanada's revised Throughput Study demand for key markets in Canada and the U.S.

Figure 9-4 Historical and Forecast Gas Demand in Eastern Mainline Markets



The slight increase in demand between the initial Throughput Study and the revised Throughput Study is attributable to an increase in gas demand in the U.S. Middle Atlantic region. The revised Throughput Study also indicated decreased expectations for Ontario demand growth in the order of 0.14 Bcf/d (4.0 $10^6 m^3/d$) to 0.39 Bcf/d (11.0 $10^6 m^3/d$) starting in 2013 and lasting for the remainder of the forecast period. This lowered expectation is due primarily to lower projected Gross Domestic Product (GDP) growth rates in Canada between 2012 and 2015.

Dr. Carpenter noted that a potential upside for market demand is that a continued low gas price environment would result in increased expectations for growth in U.S. gas-fired generation. Dr. Carpenter stated that this increased potential for gas to substitute for coal may be less relevant in the U.S. northeast as it is more of a Midwest phenomenon and would not fully offset the lower economic growth rate. Furthermore, Dr. Carpenter noted that there is significant uncertainty regarding the timing of coal plant retirements and the amount that will ultimately occur in the U.S. due to regulatory, political and market uncertainties. Mr. Fleck added that in Wood Mackenzie's forecast there is a decrease in the overall consumption of gas-fired power generation in Canada and the U.S. due to lower economic growth.

Views of Intervenors

CAPP stated that the Mainline's market risk has increased somewhat since RH-2-2004 Phase II, and that the increasing demand for eastern short-haul service indicates that the Mainline is maintaining its market share for that segment of the pipeline.

Ontario accepted TransCanada's evidence that market risk had increased beyond the level established in the RH-2-2004 Phase II Decision.

9.2.5 Competitive Risk

Competitive risk refers to the business risk that results from competition for customers at both the supply and market ends of the pipeline system. While it directly affects business risk by providing customers with alternatives to ship or purchase gas, it also indirectly affects market and supply risk. In this Decision, all aspects of risk associated with competition for customers are discussed as part of competitive risk. Views of intervenors on competitive risk specifically related to business risk are summarized below. Views of TransCanada and intervenors on the Mainline's overall competitiveness and its competitiveness in the context of the various proposals put forth in this proceeding are discussed in Section 12.1.

Views of TransCanada

TransCanada submitted that its competitive risk has increased dramatically since it was last assessed in the RH-2-2004 Phase II proceeding.

TransCanada identified several structural changes in eastern markets that have increased the competitive risk of the Mainline, including: the introduction of Rockies supplies into eastern markets; introduction of LNG supply into eastern U.S. markets; and, the emergence of shale gas supplies throughout North America. The construction of the Alliance/Vector pipeline systems has had an impact on the competitive risk of the Mainline. TransCanada stated that these structural changes have facilitated the replacement of long-haul Mainline contracts with short-haul Mainline contracts, which led to the displacement of Mainline long-haul supplies out of markets traditionally served by the Mainline and caused a reduction in Mainline flows.

According to TransCanada, these structural changes have manifested themselves in eastern Canadian and northeast U.S. markets through a number of infrastructure projects. In the eastern Canadian markets, TransCanada discussed the following projects as contributing to the replacement of long-haul contracts with short-haul contracts; being in direct competition with the Mainline long-haul system; or bypassing the Mainline long-haul system altogether:

- expansions of the Vector system;
- expansions of the Union Dawn-Parkway system;
- the proposed Dawn Gateway project;
- the Sault Ste. Marie supply diversity initiative;
- the Enbridge Gas Distribution System Reinforcement project;
- development of Utica shale supply in Québec;
- development of Collingwood shale supply in Michigan;
- increased renewable gas supplies; and
- TransCanada's Eastern Mainline Expansion.

In the U.S. northeast, TransCanada named the following projects as contributing to the displacement of long-haul Mainline throughputs; reversal of flows, particularly at the Niagara and Chippawa points; or overall bypass of the Mainline system:

- Rockies Express;
- Tennessee Northeast Supply Diversification Project;
- National Fuel Gas Northeast Access Project;
- National Fuel West to East Project;
- Empire Pipeline Tioga County Extension;
- Canaport LNG terminal;
- Iroquois NE 08/09 Project;
- Iroquois Market Access Project;
- reduced deliveries from Iroquois system into the Tennessee 200 Line;
- NYMarc Project;
- Iroquois Wright Transfer Compressor Project;
- Tennessee Project connecting the 300 Line to the 200 Line near Wright.

TransCanada stated that new sources of supply available in the Mainline's traditional market area have also led to an increase in competitive risk. Growing production from previously uneconomic gas supplies in the Marcellus and Ohio Utica shale gas plays in the northeastern U.S. have forced WCSB gas out of its traditional markets in Ontario, Québec and the U.S. northeast. Production from the Marcellus is currently 4.5 Bcf/d (127 10^6m^3/d). In TransCanada's base case supply forecast for the Marcellus, production is forecast to reach 8.5 Bcf/d (240.5 10^6m^3/d) by 2020. As for the Ohio Utica, TransCanada stated that a substantial and growing supply increment was included for the first time in the revised 2012 TSO based on recent drilling data and resource assessment showing a large, economic resource base.

TransCanada provided a forecast of supply available to the Mainline via the Dawn hub in southwestern Ontario. Dawn is able to source gas from basins in the U.S. as well as the WCSB primarily through the GLGT and Vector pipelines. GLGT sources much of its gas from the WCSB through an interconnection with the Mainline at Emerson while Vector sources WCSB gas through connections to the Northern Border and Alliance pipelines. Imports of natural gas at Dawn through these two pipeline routes is expected to decline from 2.8 Bcf/d (79.3 10^6m^3/d) in 2010 to between 2.1 Bcf/d (59.5 10^6m^3/d) and 2.2 Bcf/d (62.3 10^6m^3/d) by 2020. TransCanada stated that Vector in particular is responsible for much of this decline due to changes at the Niagara and Chippawa export points, which are transitioning to import points.

In addition to increased competition from new sources of supply in close proximity to its traditional market areas, TransCanada submitted that the Mainline is facing substantial competition in the WCSB supply area. Specifically, TransCanada named the following projects and developments impacting the Mainline's competitive risk:

- proposals of LNG export projects in B.C.;
- proposal of a gas-to-liquids project;
- growing competition for natural gas supply from intra-Alberta demand; and
- completion of the Bison and Ruby projects in the U.S.

The Mainline also competes with intra-Alberta demand for natural gas, primarily from the oil sands. In its supply and demand analysis underpinning the revised Throughput Study, TransCanada estimated that total intra-Alberta demand increases to 5.0 Bcf/d (141.6 $10^6m^3/d$) by 2020, up from 3.5 Bcf/d (99.1 $10^6m^3/d$) in 2011.

TransCanada submitted that because of the structural changes outlined above, long-haul contracts have declined from 7.1 Bcf/d (201.1 $10^6m^3/d$) in 1998-99 to 1.3 Bcf/d (36.8 $10^6m^3/d$) in 2010-2011, leaving substantial uncontracted long-haul capacity and resulting in higher tolls.

Views of Intervenors

CAPP submitted that the Mainline's competitive risk is somewhat higher than that at the time of either RH-2-2004 Phase II or RH-1-2008. Because tolls would be higher under the Status Quo and CAPP's multi-year fixed tolls proposal would have deferral balances, it is likely that the Status Quo and the CAPP proposal would result in somewhat greater competitive risk than the Restructuring Proposal.

Ontario agreed with TransCanada's assessment of the increase in competitive risk.

TransCanada's Reply

Dr. Carpenter submitted that CAPP's analysis of business risk failed to elaborate on the increased competitive risk that the Mainline is facing on both the supply and market ends of its system. In particular, Dr. Carpenter emphasized CAPP's failure to incorporate the prospect of west coast LNG exports, which may reduce supply available to flow on the Mainline, and the development of Marcellus shale in northeastern U.S., which has significant implications for the Mainline's ability to compete for U.S. markets.

9.2.6 Regulatory Risk

Regulatory risk is the risk to the income-earning capability of the assets that arises due to the method of regulation of the company.

Views of TransCanada

According to TransCanada, regulatory risk has not changed in a measurable way based on the expectation that the regulatory model will continue to provide the Mainline with a reasonable opportunity to recover its prudently incurred costs. TransCanada based its view on the expectation that consideration of any prospective sharing of risk between TransCanada and its shippers would take into account the appropriate balance between risk and reward and the tools required to manage such risk. In addition, TransCanada believed that the Board would not alter its approach of considering significant changes to the regulatory framework absent a comprehensive, balanced and prospective examination of all relevant factors. In this respect, TransCanada noted that this proceeding possessed those characteristics. However, Dr. Carpenter contended that in light of the fact that the Mainline is facing significant competition risk,

regulatory risk has increased, because the probability that the Board will be able to maintain a supportive regulatory framework in the face of this increased competition risk has decreased.

According to Mr. Engen, investors would see a Board decision requiring the Mainline to maintain the Status Quo as inconsistent with the supportive nature of the Mainline's regulatory environment, and this would result in a perceived increase in regulatory risk. In those circumstances, Mr. Engen was of the view that the pipeline's risk profile would increase when a reasonable alternative, such as the Restructuring Proposal is available to mitigate those risks. He submitted that investors would see such action by the NEB as a precedent and would conclude that the Canadian regulatory environment is not as supportive as previously thought. As a result, Mr. Engen stated that such a conclusion would result in an increase in the cost of capital for all regulated assets in Canada. Regarding investors' reaction to the potential implementation of proposals from intervernors, Mr. Engen stated that investors are concerned about the apparent "flip flopping" on who bears the risk of Mainline underutilization. Because the Mainline was assumed to not bear this risk, allowed returns were lower as the Mainline enjoyed the benefit of a supportive regulatory environment. Mr. Engen submitted that caution needs to be exercised when considering alternatives to dealing with the Mainline's challenges to avoid eroding the confidence of investors in Canada's regulatory environment.

As it relates specifically to the CAPP proposal, TransCanada indicated that the CAPP proposal imposes the risk of variation from a particular throughput forecast on the Mainline causing revenue shortfalls in the short term, which are more certain than the expected future throughput increase. TransCanada stated that the CAPP proposal introduces downside risk without offsetting upside opportunities and that future shippers may incur higher tolls if volumes are lower than the Base Case forecast. In this situation, TransCanada may lose the opportunity to recover costs that are deferred. TransCanada acknowledged that the CAPP proposal would provide toll stability in the short term but tolls could increase dramatically in the longer term threatening the economic viability of the Mainline.

TransCanada expressed concerns regarding a situation where a significant amount of costs would be deferred with no opportunity or plan to recover these costs.

Views of Intervenors

CAPP

CAPP indicated that its proposal to fix tolls over a multi-year period would be slightly riskier than the Status Quo since it exposes the Mainline to greater risk in the event its throughput forecast does not materialize. This proposal would also affect the risk of year-to-year earnings for the Mainline. Despite those increases in risk, CAPP submitted that the multi-year fixed tolls proposal would address the issue of regulatory lag in that TransCanada could return to the Board at any time if the throughput does not support the longer-term viability of the Mainline and includes off-ramps to avoid excessive deferral of costs. According to CAPP, increasing pricing flexibility, which is a feature of its proposal, would enhance TransCanada's opportunity to recover its prudently incurred costs. Further, CAPP was of the view that the adoption of the multi-year fixed tolls proposal does not increase the likelihood of stranded assets for the

Mainline because if volumes are lower than forecasted, TransCanada would be back in front of the NEB in two years regardless of whether the CAPP proposal were implemented.

CAPP disagreed with TransCanada's characterization of its proposal to the effect that it poses substantial asymmetric risk biased against TransCanada's shareholders. According to CAPP, its proposal offers some upside by proposing an incentive mechanism such that if a positive situation materializes, TransCanada benefits, and in a bad outcome situation, costs are being deferred for future consideration.

Ontario

According to Ontario, TransCanada's shareholders have faced minimal increases in business risk due in large part to the high degree of regulatory oversight of the Mainline coupled with a remaining customer base that has no alternative other than to continue utilizing the Mainline.

Views of the Board

Variability and Fundamental Risk

For the purposes of the assessment of TransCanada's Application, we accept that fundamental risk can be considered structural in nature denoting fundamental trends in the evolution of the risk landscape of the Mainline and the natural gas market in general. This was referred to as long-term risk in previous proceedings. Regarding variability risk, year-to-year variations in earnings or cash flows are considered a short-term risk. As the Board noted in the RH-1-2008 Decision, we continue to believe that the relative importance of variability and fundamental risks would depend on the relative probability, size and timing of the potential impacts arising from the specific risks materializing.

Regarding which form of risk matters most to investors and, as a result, which form of risk is most relevant for cost of capital estimation, we did not find the evidence in this proceeding to be conclusive one way or the other. While fundamental risk was presented as being the form of risk deserving the most weight by Dr. Carpenter, we note the evidence of Mr. Engen on the high interest of investors regarding the importance of predictable and stable cash flows which would signal that variability risk is a significant consideration as well. For the purpose of cost of capital estimation in this proceeding, we have considered both variability and fundamental risks, and this distinction was helpful in assessing the various forms of risks present in the multi-year fixed toll approach. Further discussion on how those aspects were considered is presented in the sections below.

Supply Risk

We believe that there have been changes in the supply and demand dynamics of natural gas in North America. Large volumes of natural gas are now available locally in market areas traditionally served by TransCanada.

We agree with TransCanada and intervenors that the WCSB is a mature basin whose conventional resources have peaked in production. It is unlikely that large, previously undiscovered conventional gas pools will be found within the timeframe of forecasts used in this Application.
We are of the view that unconventional sources of gas such as those in the Montney, Horn River Basin and Cordova Embayment will constitute the majority of future discoveries. We accept TransCanada's submission that these unconventional sources of natural gas will more than offset the long-term decline in conventional production from the WCSB. Large volumes of gas in place discovered in shale and tight gas plays such as the Montney, Horn River Basin and Cordova Embayment have added significantly to the resource base in the WCSB despite their early stage of development.

Considering all factors, we find that the risk that natural gas supply will not be economically available and accessible to the Mainline is lower today than it was when the Board last assessed the Mainline's business risk in RH-2-2004 Phase II. As a result, we believe supply risk to be lower than the last time it was considered for the Mainline.

Market Risk

We acknowledge that projections of natural gas demand growth in eastern Canada and the U.S. northeast are lower than what were forecast in the RH-2-2004 Phase II proceeding. However, natural gas demand in eastern Canada and the U.S. northeast is expected to grow over the period to 2020. In both the RH-2-2004 Phase II proceeding, and the revised Throughput Study, the projected demand growth exceeds the projected supply available to the Mainline. Therefore, the expected change in the size of the market, and the overall size of the market would not pose a constraint on the use of the Mainline.

Consequently, we do not agree with TransCanada that market risk has increased and we are of the view that there has been no change associated with the Mainline's market risk.

Competitive Risk

We accept TransCanada's submission that competitive risk of the Mainline has increased since the Board last assessed it in 2004. Unprecedented changes in the North American natural gas market, brought on by increased production of natural gas from unconventional sources, particularly from shale formations, have resulted in the realignment of gas flows on the North American natural gas pipeline grid. The Mainline's traditional function of linking the WCSB with eastern markets appears to have lessened, as those markets are now being served by supply sources located much closer to demand centers in the east. During the course of this proceeding, parties provided extensive views on the extent of these market changes and their effect on market competition, both with TransCanada's Restructuring Proposal and intervenors' proposals. While these views are discussed in detail in Chapter 12, they contributed to our consideration of competitive risk, as part of the overall business risk profile of the Mainline, as explained below.

We are of the view that natural gas markets are rapidly changing. In the course of this proceeding, forecasts of Mainline western receipts throughputs dropped by 1 Bcf/d (28.3 $10^6 m^3/d$) within a twelve month corporate forecasting cycle. Moreover, within a short period of time, North America moved from being a LNG importer to currently having advanced plans to export domestic gas as LNG to world markets.

It is our opinion that under a high toll scenario, the competitive situation of the Mainline would worsen. In such a scenario, we are of the view that the likelihood of more infrastructure projects coming online serving the same market would increase. There are a significant number of projects recently commissioned, or in various stages of planning, that take gas produced in non-traditional areas, such as the Marcellus in the U.S. northeast, to markets traditionally served by the Mainline. We agree with TransCanada's analysis, which indicated the higher the Mainline toll, the higher the probability of bypass projects materializing, as envisioned in Case 3 of the Throughput Study.

Overall, we find that the competitive risk faced by the Mainline has increased considerably and is expected to remain high for the foreseeable future. This higher competitive risk is partially offset by the unique advantages the Mainline has over contemplated bypass projects, having attributes of being already built and on-stream. This contributes to our decision to allow TransCanada additional flexibility in pricing services as described in Chapter 8, which can help mitigate this higher level of competitive risk.

Regulatory Risk

As further discussed in Chapter 12, we are implementing the multi-year fixed toll approach proposed by CAPP, with some modifications. Based on the Case 1 throughput forecast, we acknowledge that the implementation of such an approach will result in a deferral of costs and reduced cash flows in the short term. This approach also has the potential to increase the variability of cash flows making their stability and predictability more dependent on the accuracy of TransCanada's throughput forecast. In our view, while this situation increases variability risk for the Mainline from what it has been in the past, it is the most appropriate course of action under the current competitive pressures facing the Mainline.

By fixing the tolls for a number of years, this Decision will provide toll stability at a level that is expected to enable TransCanada to compete and contribute to limiting further erosion in throughput. As a result, while variability risk may be higher for TransCanada, we are of the view that the implementation of this Decision enables TransCanada to address the higher fundamental risks the Mainline is expected to face in the future.

By fixing FT tolls over a multi-year period, the cash flow generation capability of the Mainline may be constrained in the short-term. At the same time, the higher degree of flexibility in pricing services granted to TransCanada by this Decision is important. It is our expectation that TransCanada will use this added flexibility to maximize net revenues. Further, this Decision implements a streamlined regulatory process for the

Mainline that will enable the prompt development of new services and further tolling changes to help the Mainline compete in a fast changing market environment. For example, these changes could be for a load retention service or for term-differentiated tolls.

Considering the competitive pressures facing the Mainline including the current level of underutilization, we are of the view that the implementation of this Decision allows the Mainline to compete in the business environment in which it operates. We note that the Case 1 throughput scenario forecasts volumes to recover in the medium term. This has the potential to mitigate concerns related to reduced cash flows once the current period of transition is over.

If, in the future, a significant amount of costs were deferred, it could result from competitive pressures, market dynamics or TransCanada's ineffectiveness or inability to capitalize on the added flexibility provided in this Decision, among other things. The implementation of the multi-year fixed toll approach is not indicative of increased regulatory risk. To the contrary, the Mainline's regulatory risk would increase if the Board did not adjust its method of regulation to adapt to new circumstances facing the Mainline.

The manner in which this Decision is implemented corresponds to TransCanada's expectations: the sharing of risk is made on a prospective basis; the Decision provides TransCanada with the tools to manage this added risk, and is implemented after a comprehensive regulatory proceeding examining all relevant factors.

Based on the discussion above, we are of the view that regulatory risk for the Mainline has not materially changed since the RH-2-2004 Phase II Decision. With the implementation of this Decision, the Mainline will continue to have a reasonable opportunity to recover its prudently incurred costs over the period in which tolls are fixed. In the event of significant deferrals, this Decision provides adequate "off-ramps" which do not preclude any regulatory options for the future. These off-ramps are discussed in Chapter 12.

Conclusion

Based on our views outlined in the sections above, we find that the fundamental business risk facing the Mainline has increased since 2004 and we expect it to remain high for the foreseeable future. This increase is the result of higher competitive risk, which is only partially offset by lower supply risk. Further, with the implementation of the multi-year fixed toll approach, we expect higher variability risk for the Mainline because cash flows will be more dependent on the accuracy of TransCanada's throughput forecast.

9.3 Samples of Comparable Companies

The estimation of cost of capital from companies facing a comparable level of business risk to the Mainline supports the determination of a fair return, in particular the comparable investment requirement. This section considers the comparability of the various samples of companies presented in evidence. To the greatest extent possible, comparable companies have to face similar business risk as the Mainline. If they do not, judgment needs to be applied to the cost of capital estimates to reflect business risk differences. The aspects described in this section need to be considered explicitly in determining the appropriateness of comparable companies. In particular, an assessment of the U.S. regulatory regime is presented as some samples are composed of companies operating in the U.S.

Competition for Capital on a Global Basis

Views of TransCanada

According to TransCanada, Canadians are increasingly pursuing investment opportunities and returns in the U.S. and foreign markets. At the same time, Canadian issuers are raising substantial capital outside Canada. As a result, TransCanada was of the view that investment opportunities and expected returns on capital in other jurisdictions, particularly in the U.S. are relevant and must be taken into consideration when determining whether approved returns on equity meet the Fair Return Standard.

Views of Intervenors

CAPP's witness, Dr. Booth, noted that he gave weight to the U.S. evidence in the determination of the market risk premium (MRP) for two main reasons. First, most of the restrictions on keeping Canadian capital within Canada have been removed, resulting in significant capital outflows and higher expected returns on Canadian investments. Second, Canadian governments have moved to a primary surplus on their budgets, resulting in lower interest rates in Canada than the United States for the last five plus years, which has removed the historic bias of a smaller Canadian MRP over a higher and riskier Canadian government bond yield.

U.S. and Canadian Regulatory Regimes

Views of TransCanada

According to Dr. Carpenter, the regulatory regimes in the U.S. and Canada have fundamentally the same design. Similarities include the determination of gas pipeline tolls based on the cost-of-service approach, the historical cost rate base, the application of the Fair Return Standard and that both Canadian and U.S. regulators have approved pipelines that compete with incumbent pipelines. Further, both regulatory regimes are founded on the same basic principles with regard to earnings and capital recovery offering regulated pipelines a reasonable opportunity to recover prudently incurred costs.

Because rate cases for U.S. gas pipelines are relatively infrequent, these pipelines do not utilize deferral accounts, and tend to face volumetric risk, year-to-year earned returns for U.S. gas

pipelines tend to be more variable relative to allowed returns than in Canada. On the other hand, TransCanada noted that some differences between the regulation of Canadian gas pipelines cause them to be more risky than U.S. gas pipelines because U.S. gas pipelines have a greater opportunity to respond to the competition encouraged by regulatory policies. Mechanisms such as flexible pricing and service design evidenced by discounted, negotiated and interruptible rates cause U.S. gas pipelines to be better positioned than Canadian gas pipelines to mitigate the risk of increased competition and bypass.

Dr. Carpenter noted that U.S. regulators allow gas pipelines the opportunity to recover their prudently incurred costs, including costs associated with discounting to meet competition, the cost of capacity non-renewals, and one-time costs resulting from the transition to competition. In some instances, the FERC has accepted settlements in which a pipeline has agreed with its customers to share such costs, but Dr. Carpenter mentioned that these cases are relatively few in number and do not reflect a fundamental difference in regulatory policy. In that regard, Dr. Carpenter quoted the FERC in the *Gas Transmission Northwest* rate case in 2006 as it relates to the risk-sharing mechanism.

> The Commission has not established a general policy or bright-line test regarding risk-sharing mechanisms. To the contrary, the Commission has addressed each proposal on a case-specific basis, including a number of proposals included in settlements. A number of these cases were relied on by objecting parties, but have no precedent value because they were the result of negotiated settlement.[66]

Overall, Dr. Carpenter was of the view that U.S. and Canadian gas pipelines were comparable because although some differences in variability risk may exist between the two regulatory regimes, the fundamental risk related to a loss that the regulator will be powerless to prevent is similar in both countries.

Views of Intervenors

CAPP

Dr. Booth indicated that estimates derived from U.S. utilities cannot be used in Canada without significant adjustments for their generally higher risk and the higher current cost of capital. According to Dr. Booth, this higher risk is evident in the reports of rating agencies. Dr. Booth was of the view that U.S. estimates are biased high when applied to Canadian utilities because U.S. financial markets exhibit more risk than Canadian markets and have generated higher risk premia in the past. In addition, although the principles of regulation are the same between Canada and the U.S., it was the view of Dr. Booth that those principles are implemented differently in the U.S.

Dr. Booth stated that the decisions of the British Columbia Utilities Commission, the Board of Commissioners of Public Utilities of Newfoundland and Labrador, and the Régie de l'énergie, indicate that a sample of U.S. comparables cannot be used as a benchmark for a Canadian utility's fair ROE without either significant evidence that the regulatory, institutional, economic and financial conditions are the same or making significant adjustments to the estimated ROE. According to Dr. Booth, ROE estimates for U.S. utilities should be reduced by at least 100 basis points to account for the difference in U.S. market risk premium and long-term Treasury yield.

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[66] "Order on Technical Conference" FERC Docket No. RP06-407, December 21, 2006 at p. 31.

IGUA

Ms. Wiggins, one of IGUA's expert witnesses, indicated that U.S. policy for interstate natural gas pipelines makes a distinction between the concept of prudency and the "used and useful" concept. She submitted that the concept of prudency is generally backward looking in assessing whether investment was proper at the time it was made. On the other hand, the concept of "used and useful" is forward-looking in determining whether assets remain used and useful for purposes of calculating rates regardless of the prudency of the original investment. According to Ms. Wiggins, the FERC has adopted cost sharing approaches where the pipeline and its customers share the cost burden associated with assets no longer used and useful or significantly under-utilized arising from situations involving market changes.

More specifically, Ms. Wiggins submitted that in cases where pipeline customers turn back capacity, the FERC does not allow the pipeline to place the full burden of the costs related to this unutilized or excess capacity on the remaining customers. Instead, Ms. Wiggins stated that the FERC requires that the pipeline and the customers share these costs. She indicated that TransCanada had taken the quote from the FERC on the *Gas Transmission Northwest* case out of context as it relates to the lack of precedent value. According to Ms. Wiggins, there was no dispute in this case over the threshold determination of whether there should or should not be a cost-sharing mechanism. As a result, she was of the view that when the FERC indicated that there is no bright-line test, the FERC was referring to the specific level of sharing between the pipeline and its shippers. According to Ms. Wiggins, the FERC has been very clear that as a threshold matter, there should be cost sharing between the shipper and the pipeline in the case of capacity turn back. Ms. Wiggins also noted that parties at the FERC often settle cost-sharing issues.

APPrO

Ms. Crowe, an expert witness for APPrO, indicated that the FERC has a principle that captive customers should not be forced to pay 100 per cent of the cost of stranded assets that become underutilized when a customer exits the system. Ms. Crowe also noted that the FERC generally lets the question of how costs should be shared be determined on a case-by-case basis. Ms. Crowe specified that the FERC does not have a generic policy statement regarding risk sharing.

Tenaska

According to Tenaska, U.S. pipelines have higher earnings variability related to throughput and forecasting risk than the Mainline. As a result, Tenaska was of the view that, from an investor's perspective, U.S. pipelines are riskier than the Mainline.

Samples of Comparable Companies

Views of TransCanada

TransCanada indicated that the ideal sample would be a sample of companies with the same risk characteristics as the Mainline. However, because there is no ideal sample of publicly traded Canadian pipelines companies that face business risks similar to those of the Mainline, reliance was placed on three samples: the Canadian utilities sample, the gas LDC sample and the pipeline sample. These samples are described in the following paragraphs.

The Canadian utilities sample was not considered by TransCanada as a good benchmark for the business risk of the Mainline because this sample was diverse and was heavily weighted towards lower-risk utility-type activities. The business activities of this sample were grouped in three categories: pipelines (interstate oil and gas pipelines), utility (gas LDC and electric LDC) and non-utility (unregulated activities, such as electricity generation). The most prominent category, utility, has lower risk than the Mainline. According to TransCanada, this sample was not sufficiently concentrated in regulated gas transmission activities to provide a good benchmark for the cost of capital for a regulated natural gas pipeline. As a result, TransCanada gave no weight to this sample in deriving the return recommendation.

TransCanada presented the gas LDC sample as having lower risk than the Mainline because their operations are almost exclusively in lower-risk gas LDC activities. According to TransCanada, LDCs tend to be insulated from competition by their franchise's service territories. LDCs also tend to provide distribution service to a customer base composed predominantly of residential and commercial customers that are not at risk of bypass and not as price-sensitive as industrial load. TransCanada also indicated that LDCs can, in most cases, expect to pass on any reasonably-incurred costs to end customers. Considering all of the above, Dr. Carpenter considered the gas LDC sample to have lower fundamental risk than the Mainline.

As it relates to variability risk, TransCanada noted that companies in the gas LDC sample may be somewhat riskier than the Mainline because the gas LDCs comprised in the sample do not have the same extent of deferral account coverage as the Mainline and rate cases tend to be less frequent in the U.S.

The pipeline sample consisted of both oil pipeline companies and gas pipeline companies. For the purpose of this Decision, the full sample comprised of both oil pipeline companies and gas pipeline companies will be referred to as the "pipeline sample"; oil pipeline companies will be part of the "oil pipeline sample"; and, gas pipeline companies will be part of the "gas pipeline sample".

TransCanada indicated that the oil pipeline sample was of higher risk than the gas pipeline sample, and would be of higher risk than the Mainline if the Restructuring Proposal were approved. However, Dr. Carpenter submitted that the oil pipeline sample would be a better comparator for the Mainline if the Restructuring Proposal were not approved, for example, in the Status Quo case, because the Mainline would be facing much higher competition and regulatory risk than even the riskiest U.S. gas or oil pipeline. In addition, companies in the oil pipeline

sample were considered of higher risk because they were comprised of approximately one-half of non-regulated activities, which are expected to have higher risk than the oil pipeline business. Such activities typically require a somewhat higher cost of capital than regulated pipeline activities.

The companies included in the pipeline sample were primarily master limited partnerships (MLPs). TransCanada submitted that MLPs have some structural differences compared to companies organized as corporations (identified as C-corporation in discussing MLPs). MLPs are not subject to corporate income tax, unlike C-corporations. MLPs must distribute most of their cash to unit-holders, and allocate income to unit-holders, resulting in returns on and of capital. TransCanada submitted that the net result of the difference in tax treatment, at the investor level, is a modest tax advantage for investors in C-corporations compared to MLPs, however, this is not likely to be material and should not impact cost of capital estimates from the risk positioning model.

As MLPs are required to distribute a large portion of their earnings to unitholders, TransCanada noted that MLPs need access to the capital markets, as they cannot finance significant projects or acquisitions with internally generated cash flow. TransCanada indicated that MLPs lost access to the capital markets during the recent financial crisis, as did C-corporations, but the impact on MLPs was greater to the extent that C-corporations retain some percentage of their cash flow rather than paying most of it in the form of distributions. TransCanada added that the requirement to return to the capital markets for financing can also be beneficial for MLP investors, as it imposes discipline on management to select attractive projects and acquisitions.

TransCanada indicated that in order to incent the general partner to grow distributions, they are subject to incentive distribution rights. These rights provide that if the general partner can raise distributions, the general partner benefits by taking an increased percentage of the distributions, and if distributions fall, general partner distributions fall proportionally more. TransCanada was of the view that this should not incent the general partner to take on any more risk than it otherwise would, as its payoff is symmetric. Dr. Vilbert added that the payoff is not precisely symmetric in the sense that if the distribution falls from one tier to another, the general partner will gain or lose more, depending on the tier structure.

Views of Intervenors

According to Ontario, the Canadian utilities sample should be given substantial weight due to the considerable degree of regulatory protection afforded to Canadian utilities.

Views of the Board

Competition for Capital on a Global Basis

We note that TransCanada's evidence indicating that Canadians pursue investment opportunities in the U.S. and beyond was not disputed in this proceeding. In our view, capital markets are increasingly integrated, and as a result, the allowed return has to enable the Mainline to compete for capital in the global marketplace to comply with the Fair Return Standard. In this context, we find that evidence from comparable companies

operating in the U.S. can be a useful proxy for investment opportunities in the global marketplace.

Regulatory Regimes

A significant amount of evidence was presented in this proceeding regarding the U.S. regulatory model in general and, more specifically, the manner in which it is implemented in various circumstances. This type of evidence was not only presented for the purpose of cost of capital estimation, but also to inform the consideration of services and pricing for the Mainline, and how U.S. utilities and regulators have dealt with turn back capacity and contract non-renewal. Nevertheless, we used all the evidence presented on the U.S. regulatory model to inform our assessment of the business risk facing regulated companies in the U.S. Based on this assessment, and our view that the Mainline needs to compete for capital beyond Canadian financial markets, we find cost of capital evidence from U.S. comparable companies to be informative in determining the fair return for the Mainline.

The evidence was clear that both natural gas pipelines and LDCs in the U.S. face higher variability risk than their Canadian counterparts. In this regard, we note the infrequency of rate cases in the U.S. and the limited use of deferral accounts compared to the use of those mechanisms in Canada. Based on the evidence presented in this proceeding, our view is that this higher variability risk does not impact the opportunity of U.S. LDCs and natural gas pipelines to recover prudently incurred costs. Variability risk is symmetrical in that it provides upside opportunities and U.S. utilities can ask their regulator for a review of their rates if required.

As it relates to the U.S. regulatory regime for oil pipelines, we accept Dr. Carpenter's assessment that those pipelines may face a higher level of fundamental risk than Canadian pipelines. U.S. oil pipelines have market-based rates thereby creating a situation where the market constrains what U.S. oil pipelines can charge. U.S. oil pipelines face greater competition risk from other modes of transportation and other pipelines. While this regulatory regime for U.S. oil pipelines is different from the regime in Canada, an assessment of the relative differences enables us to use this type of evidence to make any required adjustments to estimate the cost of capital for the Mainline.

We also found informative the evidence regarding tools available to U.S. transmission pipelines to face competition such as negotiated and discounted rates. While such tools may increase the variability risk of U.S. transmission pipelines, we did not find that the likelihood of cost recovery was significantly impacted; this was primarily based on the evidence indicating that the FERC allows the recovery of the cost of discounts. Where a pipeline faces a high level of competitive risk, we are of the view that having appropriate tools to effectively and efficiently face competition could offset the heighted fundamental risk related to competitive pressures.

We note that the evidence on cost sharing in the event of turn back capacity and contract non-renewal was not presented specifically for the purpose of cost of capital estimation.

We nonetheless found it informative in assessing how those issues are addressed in the U.S. and the extent to which the regulatory solutions may impact the likelihood of cost recovery, and hence fundamental risk. Based on the evidence on this topic, we were not persuaded that the fact that some U.S. pipelines have agreed to share with their shippers costs arising from underutilization significantly impacts the probability that a typical U.S. pipeline will not be able to recover its costs. We note that several of those instances were the result of settlements. As is the practice in relation to negotiated settlements presented in front of the Board, we are not prepared to extract one provision of a settlement and reach a conclusion on its potential impact on fundamental risk when trade-offs underlying a settlement are unknown.

We further note that no evidence was presented demonstrating that the FERC has a formal policy about contract non-renewal or turnback capacity. While the absence of such a policy could be perceived as creating a degree of uncertainty related to the manner in which costs arising from underutilization may be treated, we find the evidence in this proceeding to be inconclusive regarding the impact that this potential uncertainty may have on the business risk of FERC-regulated pipelines.

To the extent specific aspects of the U.S. regulatory regime are relevant to the interpretation of cost of capital estimates of any given sample, those aspects will be further discussed below.

Sample Companies

As presented earlier in this chapter, the Mainline is facing increased levels of competition at both ends of the pipeline. As a result, it can no longer be considered a low-risk pipeline. With the higher level of business risk it faces, the implementation of a multi-year fixed toll approach and the expectation that the Mainline needs to use a higher degree of pricing flexibility to maximize net revenues, we find it necessary to consider the cost of capital evidence from different samples in a manner that reflects this new business risk reality for the Mainline.

Considering the current circumstances facing the Mainline, we find the Canadian utilities sample presented by Dr. Vilbert to be of limited use in this proceeding. While the Mainline continues to be a Canadian operation, we find that the characteristics of the Canadian utilities sample such as lower-risk utility-type activities did not correspond sufficiently to the anticipated business risk facing the Mainline. We nonetheless considered this sample in that the Mainline operates in Canada, and as discussed in the regulatory risk section above, that the approach implemented by this Decision is responsive to the long-term business risk of the Mainline.

Given that the companies included in the gas LDC sample have monopoly franchise attributes, with their customer base being comprised of mostly residential and commercial customers with no threats of bypass, we did not assign any weight to this sample in the estimation of the Mainline's cost of capital. In our view, those attributes did not correspond to the high level of business risk facing the Mainline.

Companies in the pipeline sample face higher variability risk than the ones in the Canadian utility sample, which made them relevant comparators to the Mainline in the context of a multi-year fixed tolls approach. As explained earlier in this Chapter, under this approach, the Mainline can be expected to face higher variability risk because cash flows will be more dependent on the accuracy of TransCanada's throughput forecast. These companies also have a degree of flexibility to price services to face competition. We find that the oil pipeline sample was not only the most informative of the two pipeline samples, but also of all samples presented in evidence. We are of the view that the oil pipeline sample is the closest to the Mainline in terms of business risk, because companies captured by this sample face a significant level of competition. Also, their rates are constrained by market forces, which is similar to the situation the Mainline is expected to face for some of the services it offers or some markets it serves. Further, we find the gas pipeline sample to be informative in the estimation of the cost of capital for the Mainline primarily because it was presented as being the most pure-play sample for gas pipelines, the business in which the Mainline operates.

Most companies in the pipeline sample are structured as MLPs and we find that the market-observed cost of equity for an MLP requires minor adjustments when used to estimate the cost of capital of a C-corporation. In our view, this is primarily due to MLPs' increased reliance on the equity market for new capital issuances relative to C-corporations. MLPs are required to pay out a large percentage of their capital, which means that financing growth through internally generated cash flows may be restricted. This means they need to raise capital in the marketplace even during unfavourable times when their market value may be depressed. We believe that this increases the cost of capital for an MLP, relative to an otherwise identical C-corporation, albeit the amount of the increase is small. We did not believe the incentive distribution rights or tax differences had a material effect on the MLP cost of capital estimates. Considering these differences, we felt a small downward adjustment to the MLP cost of capital estimates was required to improve comparability with an assumed C-corporation like the Mainline.

We note that companies in both the Canadian utilities sample and pipeline sample had some degree of unregulated activities, which would likely contribute to a higher estimated cost of capital than it would otherwise be if such activities were not part of their lines of business. In accordance with past Board practice to adjust downward the estimated cost of capital of sample companies to account for unregulated activities, we have used the same approach in this proceeding.

9.4 Cost of Capital Estimation

The following section covers the various estimation techniques and methodologies used to estimate the cost of capital from financial markets and comparable companies.

9.4.1 Risk Positioning Methodology

Views of TransCanada

TransCanada estimated the cost of equity for the sample companies using the risk positioning approach, which relied on the capital asset pricing model (CAPM) and variations of the CAPM. CAPM is represented by the following equation:

$$r_s = r_f + \beta_s * (MRP)$$

Where
- r_s: Cost of capital for investment S
- r_f: Risk-free rate
- β_s: Beta risk measure for investment S
- MRP: Market Risk Premium

Dr. Vilbert submitted that the CAPM is a widely used model to estimate the cost of equity, relying on the empirical fact that investors price risky securities to offer a higher expected rate of return than for safe securities. However, Dr. Vilbert noted that CAPM has not performed well as an empirical model, and noted that this can be adjusted by adding an alpha parameter to the CAPM equation as presented below. This equation is the empirical capital asset pricing model (ECAPM):

$$r_s = r_f + \alpha + \beta_s * (MRP - \alpha)$$

By including an alpha factor, the intercept of the securities market line increases, and the slope of the line is reduced. Compared to the CAPM, Dr. Vilbert submitted that the ECAPM flattens the securities market line, and its results more closely match the results of empirical tests. Dr. Vilbert was of the view that the risk positioning results from ECAPM deserve the most weight, because ECAPM adjusts for the empirical observation that betas of less (more) than 1.0 tend to underestimate (overestimate) cost of capital in the CAPM model. Dr. Vilbert acknowledged that the use of a long-term risk-free rate in the CAPM model has the effect of increasing the intercept and decreasing the slope of the security market line, but the correction is not large enough based upon the empirical evidence.

Beta Factor

In utilizing the CAPM, Dr. Vilbert used adjusted betas for the Canadian utilities sample to account for the fact that utility stocks exhibit interest rate sensitivity and to avoid underestimating the risk of sample companies in relation to the recent financial crisis. The beta adjustment assumed that betas for utilities converge to 1.0 over time (sometimes referred to as the Blume Adjustment). Dr. Vilbert believed that even adjusted betas were biased downward,

because a portion of the period of turmoil in the market that previously resulted in low or negative beta estimates was still included in the estimation period, and the ongoing financial crisis is likely to cause estimated utility betas to decouple from the market.

Dr. Vilbert used only unadjusted betas for the gas LDCs and pipeline samples to ensure consistency with prior accepted evidence in Canadian proceedings. He submitted that the use of unadjusted betas is conservative, and that the higher Discounted Cash Flow (DCF) results may support the use of adjusted betas.

Market Risk Premium

Dr. Vilbert used an MRP of 5.75 per cent (scenario 1), and presented a sensitivity test of the effect of an MRP of 6.25 per cent (scenario 2). Dr. Vilbert submitted that the risk premium investors require is higher under periods of economic turmoil. Because of this, Dr. Vilbert was of the view that the MRP is higher today than it was in the recent past, hence the need to develop a second scenario to account for the recent financial crisis. Dr. Vilbert indicated that the results of the DCF analysis support giving some weight to the higher MRP of 6.25 per cent, as the DCF results supported a higher cost of equity than the risk positioning methodology.

Risk Free Rate

Dr. Vilbert used a long-term risk free rate of 4.05 per cent, which was based on the long-term (10-year Canadian government bond) Consensus Forecast, plus a maturity premium of 25 basis points.

Using the risk positioning methodology, Dr. Vilbert produced results for the gas pipeline sample and oil pipeline sample, as follows:

Table 9-2 Risk Positioning Results for Pipeline Sample

Samples	Direct Cost of Equity Estimates			After-Tax Weighted Average Cost of Capital (ATWACC)			Implied cost of equity with ATWACC at 40% equity thickness		
		ECAPM			ECAPM			ECAPM	
	CAPM	$\alpha = 1$	$\alpha = 2$	CAPM	$\alpha = 1$	$\alpha = 2$	CAPM	$\alpha = 1$	$\alpha = 2$
Gas[1]	8.1%	8.4%	8.7%	6.6%	6.9%	7.1%	11.2%	11.7%	12.2%
Oil[1]	8.3%	8.6%	8.8%	6.9%	7.1%	7.3%	11.9%	12.4%	12.8%
Gas[2]	8.5%	8.8%	9.1%	6.9%	7.1%	7.3%	11.7%	12.3%	12.8%
Oil[2]	8.7%	8.9%	9.2%	7.2%	7.4%	7.6%	12.5%	13.0%	13.5%

1: Scenario 1: r_f = 4.05 per cent, MRP = 5.75 per cent
2: Scenario 2: r_f = 4.05 per cent, MRP = 6.25 per cent

Views of Intervenors

CAPP

Dr. Booth, CAPP's cost of capital witness, indicated that the CAPM is the most commonly used risk premium model, because it is intuitively correct, capturing both the time value and risk value of money. He noted that the CAPM measures the appropriate concept: which is how much does a security add to the risk of a diversified portfolio, which is the central idea of modern portfolio theory.

Dr. Booth estimated the MRP of common equities over long-term Canada bonds at 5.0-6.0 per cent, based on Canadian capital market history going back to 1924.

Dr. Booth submitted that the recent history of Canadian and low risk U.S. utilities indicates beta coefficients of about 0.30-0.35 which can be considered low as they have withstood the impact of the financial crisis much better than the market as a whole. On a go-forward basis, Dr. Booth was of the view that the beta coefficients of Canadian utilities will move back to their historical range of 0.45-0.55.

Using these figures, and a 3.30 per cent forecasted long-term Canadian bond yield for 2012 and 3.8 per cent estimate for 2013, Dr. Booth provided a CAPM estimate of 6.05 per cent to 7.10 per cent for 2012 and 6.55 per cent to 7.6 per cent for 2013, after adjusting for floatation costs. Dr. Booth indicated that an adjustment to these CAPM estimates of 0.4 per cent is required to account for the increased corporate yield spread over Government of Canada bonds. Additionally, Dr. Booth noted that due to the effects of Operation Twist in the U.S., and as evidenced by the current increased preferred share yield spread over Government of Canada bonds, an additional premium of 0.8 per cent should be added to the estimates to arrive at his benchmark utility ROE estimates of 7.8 per cent for 2012 and 8.3 per cent for 2013.

Dr. Booth stated that the use of ECAPM for low risk stocks like utilities increases the estimate of the rate of return. He further noted that because regulatory hearings typically use the CAPM with the long-term Canada bond yield, this practice automatically increases the risk-free rate and adjusts for the bias noted in tests of the CAPM. He added that because the yield curve is steeper today than is normally the case, this further supports the notion that the CAPM is appropriate, and that the ECAPM is not required.

According to Dr. Booth, judgment needs to be used in adjusting betas back to their historical value. Dr. Booth argued that the Blume Adjustment, which adjusts beta towards 1.0, is not appropriate because it relies on adjustments for typical average stock.

Ontario

Ontario argued that the Board should continue its practice of rejecting ECAPM in favour of CAPM.

TransCanada's Reply

TransCanada submitted that while use of the long-term risk-free rate partially corrects for the issues with the CAPM, it does not fully correct for these issues, and an alpha factor is still required. Dr. Vilbert noted that the literature recommends an alpha adjustment of 2.0-7.0 per cent (when using the short-term risk-free rate in the CAPM), and he has only used alpha factors of 1.0-2.0 per cent, due to the use of the long-term risk-free rate in the CAPM. Dr. Vilbert was of the view that Dr. Booth's failure to use ECAPM caused underestimation in Dr. Booth's recommended return for the Mainline. Additionally, he noted that the further the samples' betas are from 1.0, the greater the magnitude of the beta underestimation if ECAPM is not used.

9.4.2 Discounted Cash Flow Model

Views of TransCanada

In addition to the risk positioning methodology, Dr. Vilbert estimated the cost of equity for the Canadian utilities and gas LDC samples with the DCF methodology. The simple DCF model, as presented by TransCanada, is represented by the following equation:

$$r = D_1/P + g$$

Where
- r: Cost of capital
- D_1: Dividend at the end of period 1
- P: Current market price of the security
- g: Perpetual growth rate

Dividend and Share Price

TransCanada submitted that the DCF method assumes that the market price of a stock is equal to the present value of the dividends that its owners expect to receive. The method also assumes that this present value can be calculated by the standard formula for the present value of a cash flow stream. Dr. Vilbert used dividends from the second and third quarter of 2011 (the last recorded dividend payment reported by Bloomberg at the time of the preparation of the evidence).

Dr. Vilbert did not estimate the cost of equity for the pipeline sample using the DCF methodology, as this sample primarily consisted of MLPs. Dr. Vilbert noted that applying the DCF method to a company organized as a MLP is often controversial, because the companies often pay out more in dividends than earnings, and because of questions regarding the sustainability of long-term growth rates for MLPs.

While Dr. Vilbert calculated the cost of equity for the sample companies using the simple DCF model, he submitted that there can be issues with the strong assumptions in the simple DCF model. Because of these issues, Dr. Vilbert relied on a variant of the DCF model that makes slightly less strong assumptions, using varying dividend growth rates in the near term before assuming a perpetual growth rate beginning in year eleven (the multistage model).

Dr. Vilbert explained that he only gave weight to the multistage DCF results in reaching the ATWACC point estimates for the Canadian utilities and gas LDC samples. Dr. Vilbert noted the single-stage DCF model served as a useful check for the risk positioning results.

Growth Rate

Dr. Vilbert was of the view that historical growth rates are not relevant to forecast current expectations of investors, and therefore used forecasted growth rates from Value Line, which are estimated by equity analysts. In the multi-stage model, Dr. Vilbert relied on the company-specific growth rates until Q2, 2016 and on the long-term GDP forecast for Q3, 2021 onwards. During the period from Q2, 2016 to Q3, 2021, the growth rate converges linearly towards the long-term GDP forecast.

Dr. Vilbert indicated that the effect of optimism bias, the bias of analysts to overestimate growth rates for securities within their coverage universe, is least likely to affect DCF estimates for large, rate-regulated companies in relatively stable segments of an industry.

Increased Reliance on DCF due to Equity Market Turmoil

Dr. Vilbert submitted that due to the recent equity market turmoil, observed utility betas have displayed "decoupling" from the underlying market indexes. Dr. Vilbert noted that generally, he does not rely heavily on DCF estimates, but during times of great economic uncertainty, DCF models are more valuable. In this context, the DCF results provided a useful check on the risk positioning results for the Canadian utilities and gas LDC samples. Because of this, he submitted that the DCF results should be given more weight in this proceeding than they normally would.

Dr. Vilbert produced the following results, using the multi-stage DCF model:

Table 9-3 Multi-Stage DCF Results for Canadian Utility and U.S. Gas LDC Samples

	Direct cost of equity estimates	ATWACC	Implied cost of equity with ATWACC at 40% equity thickness
Canadian Utility	9.0%	6.6%	11.0%
US Gas LDC	8.8%	6.9%	11.8%

Views of Intervenors

CAPP

Reliance on DCF

Dr. Booth submitted that he views his DCF estimates as checks on his CAPM estimates since CAPM estimates are usually in the right "ball-park". In this proceeding, Dr. Booth compared the results from estimating the DCF cost of equity for the market as a whole to the CAPM cost of equity and noted that a CAPM estimate of the market return of 8.30 per cent was marginally low, whereas the "naïve" DCF estimate of 9.24 per cent was more reasonable. The upward adjustments Dr. Booth made to his simple CAPM estimates brought his results in line with the DCF results.

DCF Estimates for the Market as a Whole

Dr. Booth submitted that DCF estimates for the market as a whole and the Standard and Poor's utility indices are more reliable than DCF estimates for individual companies due to the significant measurement error attached to forecasting future growth rates. Dr. Booth argued that for the market as a whole the forecast dividend yield can be estimated with very little error, so the estimation error is related to the forecast long-run growth rate for the market as a whole, which is also easier to estimate than for an individual stock.

Growth Rate/Issues with using the DCF for individual stocks

Dr. Booth was of the view that there are some problems when using the DCF formula for individual stocks. He submitted that some of the companies in Dr. Vilbert's sample only have growth estimates from single analysts, which can be problematic. He did note, however, that this problem was somewhat mitigated due to the fact that Dr. Vilbert used a sample of companies. Additionally, Dr. Booth noted that analyst growth estimates are usually too optimistic, and that this optimism bias causes the analysts to estimate growth rates that are too high. Finally, Dr. Booth submitted that analyst forecasts are based on earnings growth, rather than the sustainable dividend growth rate, which can cause the growth rates to be overestimated in periods where earnings are expected to recover and hence grow more than dividends.

TransCanada's Reply

TransCanada submitted that the DCF model relied on by Dr. Booth has a major disadvantage, in that it relies on historical accounting information in order to estimate the expected dividend thereby foregoing the main benefit of the model of being forward looking. Dr. Vilbert submitted that the use of the analyst-estimated earnings growth rates (as opposed to the sustainable dividend growth rate recommended by Dr. Booth) is appropriate, as the simple version of the DCF model assumes that earnings growth and dividend growth are constant.

Dr. Vilbert reiterated his view that analyst-forecasted growth rates are appropriate to use for rate regulated utilities, as they are not subject to a material optimism bias. Further, he was of the view

that analyst forecast growth rates are superior to historic estimates of the growth rate, as they are forward looking in nature, and should be more accurate than historic estimates.

9.4.3 ATWACC & Financial Risk

Views of TransCanada

Dr. Vilbert was of the view that when considering financial risk, the ATWACC approach is superior to the traditional approach. This is because the traditional method often makes no direct connection between differences in the capital structures of the sample firms used to estimate the cost of equity and the regulatory capital structure used to set rates. Dr. Vilbert noted that the traditional method does not appropriately account for financial risk, and could result in material errors in the allowed return. To address this issue, TransCanada estimated each sample company's cost of capital using the ATWACC. The ATWACC approach utilized by TransCanada relied on the following equation:[67]

$$ATWACC = (r_e * w_e) + (r_d * w_d * (1-T_c))$$

Where
- r_e: cost of equity
- w_e: weight of equity
- r_d: cost of debt
- w_d: weight of debt
- T_c: corporate income tax rate

Dr. Vilbert utilized each comparable's market cost of equity (as calculated with the DCF or risk positioning methodologies), market-value capital structure, and market cost of debt, as well as TransCanada's tax rate of 25.9 per cent to determine the ATWACC for each comparable company.

For the DCF model, Dr. Vilbert estimated the market cost of debt for the comparables by using the current yield on an index of utility bonds corresponding to the company's current debt rating. For the risk positioning models, the average debt rating was estimated over the five-year period corresponding to the beta estimation. The sample companies' bond ratings are reported by Bloomberg.

In relying on the ATWACC methodology, Dr. Vilbert submitted that there is no well-defined optimal capital structure for a firm. He was of the view that the tax advantages gained by a firm from increased debt financing are offset by other costs; both at the firm level and the personal investor level. Dr. Vilbert noted that a number of academic resources observed that several companies choose to maintain a high equity component in their capital structure despite an apparent opportunity to increase their value by adding more debt to their capital structures. Dr. Vilbert was of the view that this is likely not a mistake of management, but should be taken as evidence that adding additional debt to the capital structure does not increase the value of the firm within a broad range of capital structures. For these reasons, he argued that the range of

[67] A potential and small contribution from preferred shares has been ignored for this description, although it was addressed by the expert evidence submitted by Dr. Vilbert.

capital structures over which the value of a firm is maximized is wide, and should be treated as flat. Dr. Vilbert was of the view that the empirical evidence supports this assumption.

Dr. Kolbe and Dr. Vilbert provided a summary of ATWACC results for each sample group as follows:

Table 9-4 ATWACC Results

	ATWACC		
Samples	**Point Estimate**	**Range of Estimates**	
Canadian Utilities Sample	6%	5¾%	6¼%
Gas LDC Sample	6½%	6¼%	6¾%
Pipeline Sample	7%	6¾%	7¼%
Gas Pipeline Sample	7%	6¾%	7¼%
Oil Pipeline Sample	7¼%	7%	7½%

Views of Intervenors

CAPP

Dr. Booth argued that there were several flaws with the ATWACC approach. He indicated that the return on equity (ROE) is affected by book-value capital structure, as equity becomes more risky when more debt financing is utilized. This additional risk arises due to financing charges (both direct and indirect). He further submitted that the market weights of debt and equity have no bearing on financial risk, as it is the financing charges inherent in the book value capital structure that influence financial risk.

In assuming ATWACC is flat, Dr. Booth was of the view that by applying this market-based ATWACC figure to TransCanada's book value capital structure, the resulting ROE recommended by Dr. Vilbert is excessively levered-up. As a result, this would wrongfully compensate the equity holders for the difference between the market and book capital structures. Dr. Booth noted that typically, finance textbooks focus on the standard Modigliani and Miller equation that takes into account the impact of corporate taxes, which reduces the leverage impact as compared to the leverage adjustment used by Dr. Kolbe and Dr. Vilbert.

Dr. Booth submitted that ATWACC is not constant, and he presented evidence arguing that 85 per cent of North American firms have a target capital structure, attempting to minimize their overall cost of capital. Dr. Booth argued that this is evidence against the constant ATWACC assumption, which is relied on by TransCanada's cost of capital witnesses.

Finally, Dr. Booth indicated that the ATWACC methodology should not be used to set the rate of return for a regulated utility, as it is a concept used for the primary purpose of maximizing shareholder value.

CAPP submitted that what matters ultimately is whether the rate of return granted to equity holders is fair. As a result, CAPP was of the view that even if an ATWACC methodology is used, the Board should still evaluate what this means in terms of ROE.

TransCanada's Reply

Dr. Kolbe submitted that while it is true that some firms have target capital structures, this does not imply that they can materially change their value by changing their capital structure, and that significant research supports this view. Additionally, Dr. Kolbe noted that a substantial body of research indicates that firms within the same industry exhibit a wide range of capital structures, and that the most profitable firms in an industry tend to have the least debt.

Dr. Kolbe noted that Dr. Booth's cost of equity estimation technique fails to take into account the effects of financial risk, and that the use of ATWACC in cost of equity estimation is a way to accurately take into account the level of financial risk associated with the sample company's market value capital structure. Dr. Kolbe was of the view that it is the market value of a firm, not the book value, in which financial risk is reflected.

Views of the Board

The issues raised in this section, which address the techniques and methodologies to estimate the cost of capital, fall in two broad categories: 1) techniques to estimate the cost of equity, including the risk positioning approach and the DCF model; and, 2) whether it is appropriate to use the ATWACC methodology to account for financial risk in cost of capital estimation.

Techniques to estimate cost of equity: Risk positioning approach

We are of the view that CAPM is widely accepted as a model to estimate the cost of equity. This model has been relied upon by the Board in the past, and was recognized in this proceeding by expert witnesses of both TransCanada and intervenors as a valid cost of equity estimation methodology. The Board gave weight to the CAPM results presented in this proceeding.

Regarding use of the ECAPM, in our view, the fact that the CAPM model is used with the long-term risk-free rate largely corrects for its potential empirical shortcomings. To the extent this correction does not address the entirety of the empirical shortcomings, we were not persuaded by the evidence presented in this proceeding that any further adjustments needed to be made to the CAPM model. The use of the long-term risk-free rate flattens the securities market line, and thus already increases to some extent the return estimation for companies with betas less than 1.0. As a result, we did not give weight to results derived using the ECAPM.

While there could be merit in using a beta adjustment, particularly when utility betas deviate significantly from their long-term averages due to extraordinary market conditions, we were not persuaded that the Blume adjustment proposed by TransCanada

for the Canadian utility sample was appropriate. When estimating betas for regulated utilities, we do not believe it is a reasonable assumption that stand-alone regulated utility betas should converge towards 1.0 as utilities are generally recognized to be investments less risky than the average stock. We believe that the interest rate sensitivity exhibited by utility stocks in the marketplace remains a concern; however, we were not persuaded that the Blume adjustment was an appropriate way to account for this phenomenon. By giving weight to the DCF estimates, as discussed below, we have accounted for the potential downward bias in the CAPM estimates.

Rather than trying to determine whether more weight should be given to Dr. Vilbert's or Dr. Booth's specific estimations of the risk-free rate and the MRP, we have considered and weighted the final cost of capital estimations from the CAPM model from both experts. We note the risk-free rate and MRP estimates from both experts, after considering respective adjustments to account for particular circumstances in the financial markets, were in the same range.

Techniques to estimate cost of equity: DCF model

Historically, the Board has not relied on the DCF model to estimate cost of capital, primarily due to the perceived difficulty in accurately estimating growth rates. We note that the recent financial market turmoil generates utility betas lower than their historical average and evidence from both expert witnesses noted that DCF results, in the current environment, were yielding cost of equity estimates higher than those resulting from the CAPM. In the current circumstances, we are of the view it is appropriate to give weight to the multi-stage DCF results in this proceeding. Further, we note that growth rates for relatively stable industry such as utilities are more reliable, which somewhat mitigates concerns about the reliability of analysts' forecasts.

We were informed by Dr. Booth's use of the DCF model for the market as a whole, and the historic trend in cost of equity estimates calculated with the DCF methodology compared to CAPM estimates. This evidence, in our view, illustrated that while over time these models should be consistent, mechanical implementation of either model alone at any given point in time may be problematic.

Dr. Vilbert's multi-stage DCF model assumed analyst-estimated growth rates for five years, followed by a decline in growth converging at the long-term GDP growth rate over the following five years. While we believe this is a reasonable assumption for the samples, we note that this may not represent the optimal pattern in appropriately and systematically modeling samples' expected growth in all cases. Our view is that other types of DCF models may have merit, depending on the expected growth pattern of the underlying samples. We see merit in the continuation of this discussion beyond the current case around how best to estimate growth rates, at what stages specific growth rates should apply and at what point the terminal growth rate should be assumed, depending on the samples relied upon or variant of the DCF model used.

For clarity, we note that although we gave the most weight to the pipeline sample, and the DCF model was not used to estimate the pipeline sample's cost of equity, we observed that the multi-stage DCF results produced cost of equity estimates greater than the CAPM results for the other two samples. This was further supported by the submissions of Dr. Booth, showing greater cost of equity estimates for the market as a whole using the DCF methodology than using the CAPM methodology. We took this into account by adjusting upward the CAPM results from the pipeline sample in determining the fair return for the Mainline.

Both the CAPM and DCF models, in our view, have some shortcomings and some advantages in their application. We believe that giving weight to both models in this case provided a more accurate estimate of the Mainline's cost of capital than would have been provided by the application of either model on its own. We are of the view that by giving weight to both models, the effects of beta decoupling and interest rate sensitivity inherent in the CAPM should be largely accounted for. Further, concerns about the analyst-estimated growth rates used in the DCF model are counterbalanced by lower CAPM results.

ATWACC to account for financial risk

We note that some of the key assumptions embedded in the ATWACC methodology remain disputed, namely, that the ATWACC curve is flat across a broad middle range, and that the financial risk for a regulated utility is reflected in its market value, and not its book value capital structure.

We also note that the direct cost of equity estimates, before utilizing ATWACC, from Dr. Booth and Dr. Vilbert were in the same range. After utilizing the ATWACC methodology, the estimates diverged drastically. In our view, one key difference in the recommended rates of return in this proceeding stemmed from the adjustment to account for financial risk implied by ATWACC.

On the question of whether the ATWACC is constant over a broad middle range of capital structures, we believe that capital structure decisions can be relevant and can influence a firm's overall cost of capital. In our view, and as illustrated by the literature on the topic presented on the record of this proceeding, there is significant debate on the magnitude of the impact that capital structure can have on a firm's cost of capital. The magnitude of the impact can be influenced by the debt and equity mix of a firm. Considering the large difference in capital structure between the most relevant samples and the Mainline in this proceeding, we are of the view that caution needs to be used in estimating the cost of capital from those samples using the ATWACC methodology and applying it to the Mainline.

Our view is that financial risk, while reflected in market values, is also, to some extent, controlled and adjusted by the regulator in traditional rate making by setting the regulated utility's deemed capital structure. Several factors, including financial risk, influence the market value of a firm's debt and equity. Thus, we believe that the direct transposition of

a market-value based ATWACC to a book-value rate base utility, when the sample companies' equity is trading at a significant premium or discount to book value, may not accurately capture the complex nature of financial risk for regulated utilities. We do not believe the expected ROE observable in the equity markets needs to be increased to the extent suggested by the ATWACC methodology to provide the Mainline's investors with a fair return.

Additionally, we note that controlling for financial risk in cost of capital estimations can be accomplished in various ways such as using the Hamada equation. This approach was briefly explored in this proceeding during the information request process. We acknowledge that this methodology, like others, has some contested assumptions. In our view, there would be merit in further discussion on this topic.

We were not persuaded by Dr. Booth's submission that industry's use of the weighted average cost of capital to develop hurdle rates for capital budgeting decisions and create shareholder value invalidates its usefulness as a tool in estimating a regulated utility's cost of capital. We believe that in setting an allowed rate of return, particularly when considering the capital attraction and comparable investment requirements of the Fair Return Standard, we are in fact conducting a very similar process to that which private industry would follow in determining a minimum hurdle rate.

Conclusion

We find the ATWACC to be a useful tool. At the same time, we did not rely solely on the ATWACC approach to estimate the Mainline's cost of capital due to the continued contestation of its assumptions and the magnitude of the implied leverage adjustment. We believe that the level of ROE resulting from a market-based ATWACC approach would be too high, and not representative of the risks faced by the Mainline. As a result, we gave weight to the CAPM cost of equity estimates, the DCF cost of equity estimates, and the ATWACC-implied cost of equity estimates in determining TransCanada's fair return in this proceeding.

As we find the oil pipeline sample to be the most relevant comparable sample, the following point estimates were particularly useful to us as a baseline in determining a fair return for the Mainline, before adjusting for various factors:

Table 9-5 Useful Point Estimates for Fair Return

	Direct Cost of Equity Estimates	Implied cost of equity under ATWACC at 40% equity thickness
Dr. Vilbert: CAPM: oil sample (Scenario 1)	8.3%	11.9%
Dr. Vilbert: CAPM: oil sample (Scenario 2)	8.7%	12.5%
Dr. Booth's recommended ROE under CAPP proposal	9.5%	N/A

9.5 Fair Return for the Mainline

9.5.1 Return Recommendations

Views of TransCanada

If the Restructuring Proposal were approved, TransCanada asked for an overall return equivalent to an ATWACC of 7.0 per cent adjusted for the difference between the market cost of debt and the embedded cost of Mainline debt. The adjusted return would be 8.17 per cent for 2012 and 8.16 per cent for 2013. Under the traditional methodology used by the Board before RH-1-2008 where the return is granted on a by-component basis, this would be equivalent to an ROE of approximately 12 per cent on 40 per cent equity thickness. Dr. Kolbe recommended that an ATWACC point estimate of 7.0 per cent would be appropriate, as under the Restructuring Proposal the gas pipeline sample was the best benchmark. TransCanada stated that a debt-adjusted 7.0 per cent ATWACC would meet the Fair Return Standard.

If the Status Quo were maintained, TransCanada asked for an overall return equivalent to an ATWACC of 7.625 per cent adjusted for the difference between the market cost of debt and the embedded cost of Mainline debt. Accounting for embedded debt costs, the adjusted return would be 8.85 per cent for 2012 and 8.91 per cent for 2013. On an ROE basis, this would be equivalent to a 13.6 per cent ROE on 40 per cent equity thickness. Dr. Kolbe submitted that the ATWACC point estimate of 7.625 per cent is based on the oil pipeline sample, whose companies tend to be riskier and more subject to competition than gas pipelines.

Regarding the multi-year fixed tolls proposal suggested by CAPP, TransCanada indicated that this proposal increases the risk of non-recovery to a point where the opportunity for cost recovery may no longer be reasonable. In addition, TransCanada was of the view that the proposed allowed return by CAPP under its proposal is disproportionally small relative to the large increase in risk. Dr. Kolbe indicated that an asymmetry risk premium beyond the cost of capital would need to be calculated to determine a fair return for the Mainline under the CAPP

proposal, and this premium could be anywhere from a few percentage points higher than the current estimation for cost of capital to a multiple of the ATWACC.

TransCanada submitted that the impacts of the CAPP proposal on the cash flows and debt for the Mainline need to be considered. When both impacts are combined, lower cash flows from operations and higher debt could impact the credit metrics of the Mainline, and ultimately, could lead to the financial integrity of the Mainline being compromised and to difficulty in attracting capital on reasonable terms and conditions.

Views of Intervenors

CAPP

Dr. Booth provided estimates for the Mainline's cost of capital under the Restructuring Proposal, Status Quo, and CAPP proposal scenarios. According to Dr. Booth, if the Restructuring Proposal were approved, the business risk of the Mainline would be lowered to the level of a benchmark utility and a fair return for the Mainline would be of 7.8 per cent and 8.3 per cent for 2012 and 2013, respectively.

Considering the Alberta Utility Commission's Decision 2009-216 establishing its benchmark ROE at 9.0 per cent, a difference of 70 basis points with the allowed return to TQM, which is viewed by Dr. Booth as a proxy for the Status Quo, Dr. Booth determined that the premium for the Status Quo should be 70 basis points over the Restructuring Proposal.

Dr. Booth regarded the proposal from CAPP as being slightly riskier than the Status Quo since it exposes the Mainline to greater risk in the event its throughput forecast does not materialize. According to Dr. Booth, the CAPP proposal would warrant a premium of 100 basis points over the Restructuring Proposal. This 100 basis premium was comprised of a 70 basis points premium above the Status Quo as discussed above and a 30 basis point premium for a fixed-toll scenario. Dr. Booth justified the 30 basis point premium by comparing the situation of the Mainline under the multi-year fixed tolls scenario with Enbridge Gas New Brunswick Limited Partnership (EGNB). EGNB had to defer and capitalize costs to be charged in future years resulting in EGNB having up to 60 per cent of its rate base composed of deferred costs. Under these special circumstances, the New Brunswick Energy and Utilities Board granted EGNB a 275 basis point premium. Dr. Booth was of the view that a 30 basis point premium for the Mainline was reasonable given that the expected deferrals would not exceed 10 per cent of the Mainline's rate base under the multi-year fixed tolls scenario. Further, under a fixed ROE for five years, the benchmark ROE would be 8.5 per cent (rather than 7.8 per cent and 8.3 per cent) taking into account Dr. Booth's expectation that long Canada bond yields should increase over the medium term. As a result, the recommended ROE under the CAPP proposal was 9.5 per cent.

IGUA

IGUA was of the view that the rate of ROE included in TransCanada's ATWACC proposal was excessive. Accordingly, IGUA supported the views expressed in the evidence filed by Dr. Booth on behalf of CAPP on the rate of ROE that should be awarded to TransCanada.

Tenaska

Tenaska indicated that the Mainline should be allowed an ROE in the range of 8.0 per cent to 9.0 per cent. Such an allowed return would be fair and consistent with allowed returns in other jurisdictions as well as being consistent with Dr. Booth's recommendation.

Ontario

Ontario argued that the Board should grant TransCanada an ROE of 8.0 per cent on a deemed equity ratio of 40 per cent for 2012 and 2013.

TransCanada's Reply

TransCanada submitted that Dr. Booth used too much judgment in his cost of capital estimations, and that his technique did not rely on a sample, something typical for cost of capital estimation for rate-regulated entities. Dr. Vilbert was of the view that Dr. Booth's practice of estimating risk of a generic utility compared to the market and adjusting for capital market conditions also involved too much judgment, compared to traditional cost of capital analysis. Additionally, Dr. Vilbert's view was that Dr. Booth's assessment of the Mainline under the Restructuring Proposal to have the same level of risk as a generic Canadian regulated utility was flawed, and that in fact the Mainline's risk under the Restructuring Proposal would be closer to that of the pipeline sample.

9.5.2 Adjustment for Embedded Debt Costs

Views of TransCanada

TransCanada submitted that a fair return for the Mainline must allow for the recovery of the Mainline's embedded cost of debt. According to TransCanada, the Mainline's embedded costs of debt reflect costs prudently incurred by TransCanada in financing the Mainline capital requirements. Therefore, an adjustment to the requested ATWACC return is required to reflect the difference between the Mainline's embedded and market costs of debt. On an ATWACC basis, this adjustment increases the return by 1.17 per cent and 1.16 per cent for 2012 and 2013, respectively. While TransCanada described various approaches that could be used to calculate the amount of the adjustment not using a deemed capital structure, such as relying only on funded debt or relying on a policy-determined amount of unfunded debt, TransCanada indicated that it was not aware of a procedure that could avoid consideration of the amount of debt involved in a utility to calculate the adjustment for embedded debt costs.

If the Board were to adopt the ATWACC approach with market cost of debt going forward, TransCanada was prepared to only have adjustments to historical funded debt that was in place at the time of the transition from the current methodology to the ATWACC methodology. Under those circumstances, TransCanada would be at risk for future debt issuances and will have incentives to manage them. According to Dr. Kolbe, putting the utility at risk for debt costs for future debt issuances is one area where regulators can emulate competition. TransCanada submitted its cost of capital would tend to be higher if it were at risk for debt costs. While there is some uncertainty as to the magnitude of the increase in cost of capital, TransCanada was of the

view that the increase would not be large. TransCanada indicated that this approach would mean that as current funded debt expires, the amount of debt to which the adjustment applied would diminish until all historical debt has expired and no further adjustments are required.

Views of Intervenors

CAPP

CAPP submitted that it is not clear how TransCanada being at risk for the cost of new debt issuances going forward with a possible commensurate increase in the allowed rate of return would increase the competitiveness of the Mainline. According to CAPP, if the Board were to decide to grant TransCanada a return expressed on an ATWACC basis, then that return should not include an upward adjustment for the embedded cost of debt. If the Board were to use this approach, Dr. Booth indicated that the Board would need to check what that ATWACC implies for the ROE to shareholders, as the most important test is whether the return to shareholders is appropriate.

Dr. Booth indicated that if the Board were to adopt its ATWACC recommendation and make no further adjustment for the embedded debt costs, the shareholders of TransCanada would not be getting a fair return. This would be a violation of the regulatory bargain. In order to avoid this situation, Dr. Booth stated that he would prefer that the Board simply allocate the embedded debt costs as normal and then give TransCanada a fair ROE like every other utility in Canada.

Tenaska

Tenaska opposed the suggestion that TransCanada be at risk prospectively for deviations of embedded debt cost from market debt cost. In Tenaska's view, shippers would not benefit from this change. Tenaska was also of the view that this increased risk was unnecessary.

Ontario

While Ontario did not support the adoption of ATWACC for the Mainline, Ontario argued that should the Board approve TransCanada's ATWACC request, it should exclude making additional allowances for the embedded cost of debt on the basis of fairness to shippers.

TransCanada's Reply

TransCanada noted that it was possible in the RH-1-2008 Decision to have TQM's shareholders bear the risk for the difference between market and embedded debt costs because the remaining life of the existing debt was very short and because there was not a major difference between the market and embedded rate at the time of the TQM case. TransCanada submitted that this was not currently the case for the Mainline. According to Dr. Kolbe, the use of ATWACC to take into account financial risk in cost of equity estimation is an entirely distinct question from making adjustments for embedded debt costs and the use of embedded interest rates would not be a repudiation of ATWACC as alluded to by Dr. Booth.

9.5.3 Capital Structure Determination

Views of TransCanada

TransCanada indicated that the deemed average capitalization for the Mainline of 40 per cent was based on the most recent deemed capital structure in place during the 2007-2011 Mainline Settlement. TransCanada noted that a 40 or 50 per cent deemed equity ratio should not be taken as an indication of a view by TransCanada of the level of business risk of the Mainline. TransCanada was indifferent from an earnings perspective between having its return granted on an ATWACC basis or an ROE and deemed capital structure basis as long as it resulted in the same overall requested return.

Views of Intervenors

CAPP's witness, Dr. Booth, noted that relative to 2004, the Mainline is requesting an increased equity ratio of 40 per cent from the 36 per cent allowed in the RH-2-2004 Phase II proceeding when the Board last assessed the Mainline's business risk. In this context, if the Board were to accept the current 40 per cent equity ratio for the Mainline, it should be careful not to double-count any change in business risk in changing the ROE without acknowledging this increase in the common equity ratio. The ROE recommendations from CAPP were all based on a deemed equity ratio of 40 per cent.

Tenaska was of the view that a 40 per cent deemed equity ratio was appropriate as it would capture any incremental fundamental risk that the Mainline may have become exposed to over the last few years since the Board last looked at capital structure. Tenaska also offered the view that measuring incremental fundamental risk is a difficult task and noted that most intervenors accepted a 40 per cent equity ratio for the Mainline.

Views of the Board

How to grant the allowed return and cost of debt adjustment

For the years covered by TransCanada's Application and the foreseeable future, there is a significant difference between the embedded cost of debt of the Mainline and the market cost of debt. The embedded cost of debt is significantly higher than the market cost of debt. As a result, the circumstances are different than the situation surrounding the Board's RH-1-2008 Decision and we find it is necessary in this case for the allowed return on rate base to reflect the embedded cost of debt.

If the allowed return is granted on a by-component basis (that is, by granting an ROE and a deemed capital structure), there is no specific adjustment required to account for debt costs. The by-component approach flows through the embedded cost of debt in tolls; in our view, to do otherwise would be unfair to the utility, which would be at risk for debt costs without the ability to choose its capital structure. If the allowed return is granted on an aggregate basis (that is, by granting an ATWACC number without deeming a capital structure), the adjustment for debt costs would require the regulator to rely on the amount of debt embedded in the utility via a deemed capital structure or some other mechanism.

In this regard, we find that the adjustment for debt costs would have a direct impact on tolls such that if the return is granted on an aggregate basis and an adjustment of this type is performed, the overall return can ultimately vary, impacting the revenue requirement. The revenue requirement and resulting toll will be dependent on the capital structure choices made by the utility.

We find that when an adjustment for debt costs is required to ensure a fair return and a reasonable opportunity to the utility to recover embedded debt costs, it is more appropriate for the regulator to maintain a certain level of scrutiny over the utility's capital structure. In this Decision, this is accomplished by deeming a capital structure and granting the allowed return on a by-component basis. Granting the return to the Mainline in this manner does not reduce the usefulness of the ATWACC approach in estimating cost of capital subject to the caveats described in Section 9.4.

During the course of this proceeding, TransCanada has demonstrated an interest in being at risk for debt costs on a go-forward basis if the allowed return were granted on an aggregate basis. We believe that under such a system, equity holders would bear a greater amount of risk, thereby increasing the cost of capital. We believe a change in the historical practice of allowing regulated companies to recover their embedded cost of debt would alter the risks and rewards that are currently accepted by market participants. This may serve to misalign the interests of the pipeline and shippers, increase overall risk of the system, and impact long-term toll stability. After considering the higher level of business risk facing the Mainline and the higher allowed return it requires, we were not persuaded that imposing interest rate risk on the Mainline was the appropriate course of action at this time.

Deemed capital structure

We note that no parties disputed the deemed capital structure used to calculate the cost of debt adjustment proposed by TransCanada. Considering the higher level of business risk since the RH-2-2004 Phase II proceeding where the Board allowed a 36 per cent equity ratio, we find it is reasonable to deem a capital structure of 40 per cent in the current circumstances, which will be used in conjunction with an appropriate ROE to calculate the return on rate base.

The allowed return

Based on our assessment of the evidence presented in the sections above, we have determined that the overall fair return for the Mainline to be included in the revenue requirement for 2012 through the earlier of 2017 or the last year of the multi-year fixed tolls, as further described in Chapter 12, is an ROE of 11.5 per cent on a 40 per cent equity ratio, coupled with the embedded cost of debt of the Mainline. This finding is based on a number of considerations, which are explained below.

We have not assigned any quantitative weights to the various considerations that factored into our fair return determination. Determining a fair return for a regulated utility is an exercise requiring informed judgment based on the evidence presented, including the

extensive record related to business risk assessment, comparable companies and cost of capital estimation methodologies.

The fundamental business risk facing the Mainline has increased since the last time it was assessed by the Board in the RH-2-2004 Phase II proceeding. Our view is that this increase is the result of higher competitive risk, which is only partially offset by lower supply risk. Considering this higher level of fundamental business risk, the Board assigned the greatest amount of weight to the oil pipeline sample and the gas pipeline sample. We also considered the Canadian utilities sample given that the Mainline is a Canadian operation. Further, as described in the sections above, we gave weight to the CAPM cost of equity estimates and the DCF cost of equity estimates from Dr. Vilbert and Dr. Booth, as well as the ATWACC-implied cost of equity. These methodologies all have advantages and shortcomings, and considering them in combination allows us to have a picture as complete as possible of the cost of capital for the Mainline.

The consideration of the different risks associated with the CAPP proposal, as compared to the Restructuring Proposal, provided us with a basis for assessing the impact that the CAPP proposal would have on the Mainline's risk profile. Because we are implementing multi-year fixed tolls, we have increased the allowed return to account for the higher variability risk, which includes greater fluctuations in cash flow. We have accounted for the fact that throughput forecasts generally involve greater uncertainty the further they are into the future. We also considered that the allowed ROE will be fixed during the years covered by the multi-year approach, during which interest rates may rise. The return allowed to the Mainline does not consider the incentive mechanism described in Section 12.3 as we are of the view that any benefits arising from this incentive mechanism should be over and above the allowed return granted to the Mainline.

Based on this risk assessment of the CAPP proposal, we believe the incremental return recommended by CAPP for implementation of its proposal would have been insufficient to adequately compensate investors for the additional risks of the proposal.

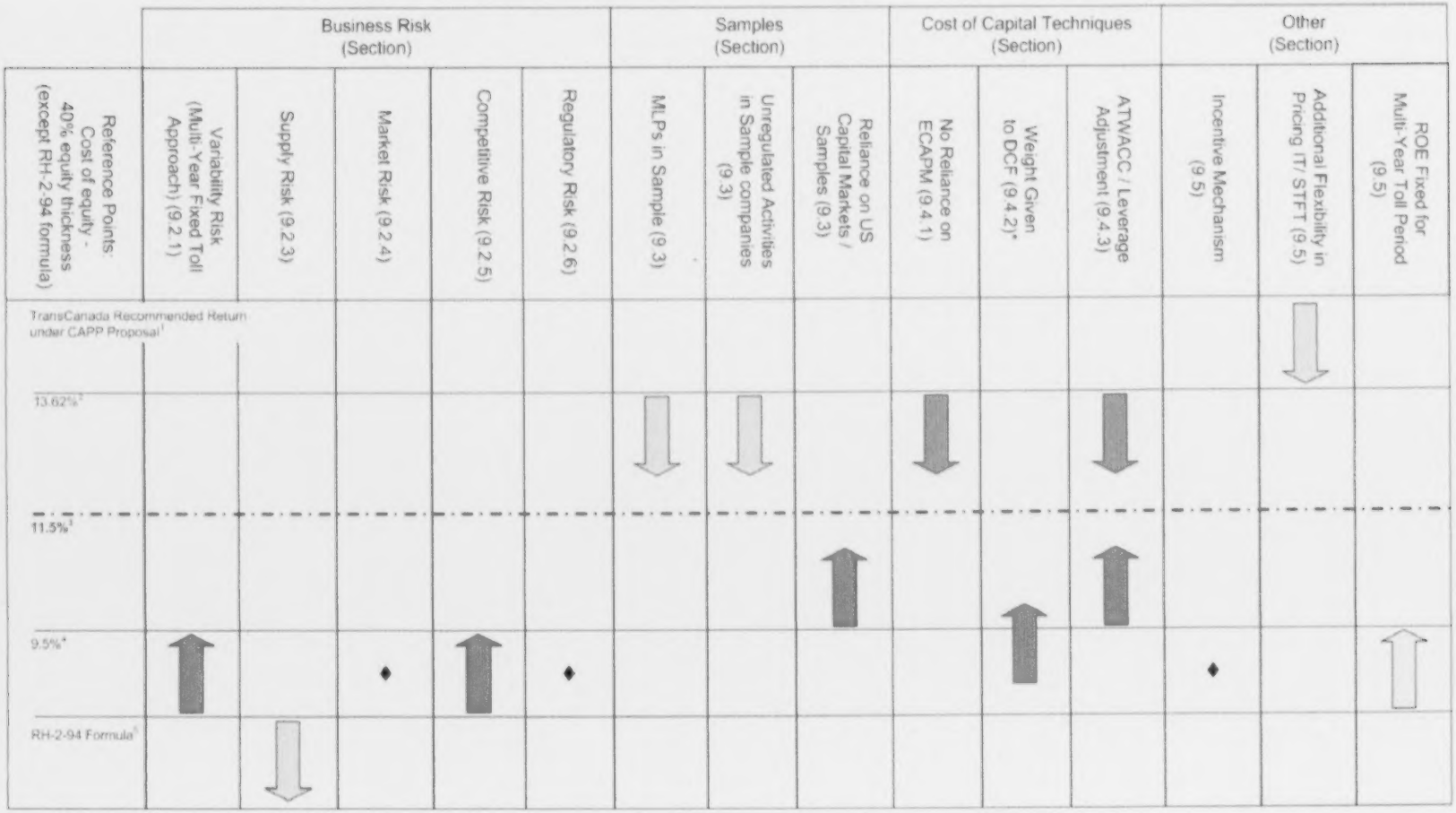
In our view, a 11.5 per cent ROE on a 40 per cent equity ratio, coupled with the embedded cost of Mainline's debt, will meet the comparable investment requirement of the Fair Return Standard, because this allowed return is comparable to the return earned by companies of similar risk. It is our opinion, based on the throughput forecast by TransCanada, that the Mainline will be able to maintain its financial integrity and continue to attract capital on reasonable terms and conditions over the period covered by the fixed toll. A higher allowed return will adequately compensate TransCanada for the higher level of variability risk involved in the multi-year fixed tolls approach due to cash flows being more dependent on the accuracy of TransCanada's throughput forecast. It is our view that TransCanada has the ability to effectively use the added flexibility allowed by this Decision to compete, maximize net revenues and mitigate risk. However, if the throughput does not materialize as forecast by TransCanada and ends up being significantly lower than the Case 1, the multi-year fixed tolls approach provides for appropriate off-ramps to mitigate such risks.

See Figure 9-5 for an illustration of the key factors that influenced our Decision for the Mainline's ROE.

Decision

We find that a fair return for the Mainline is an ROE of 11.5 per cent on a 40 per cent equity ratio, coupled with the embedded cost of the Mainline's debt.

Figure 9-5
Illustration of Factors and their Influence on the Mainline's Allowed Return on Equity


Business Risk (Section)
Samples (Section)
Cost of Capital Techniques (Section)
Other (Section)
Reference Points Cost of equity - 40% equity thickness (except RH-2-94 formula)
Variability Risk (Multi-Year Fixed Toll Approach) (9.2.1)
Supply Risk (9.2.3)
Market Risk (9.2.4)
Competitive Risk (9.2.5)
Regulatory Risk (9.2.6)
MLPs in Sample (9.3)
Unregulated Activities in Sample companies (9.3)
Reliance on US Capital Markets / Samples (9.3)
No Reliance on ECAPM (9.4.1)
Weight Given to DCF (9.4.2)*
ATWACC / Leverage Adjustment (9.4.3)
Incentive Mechanism (9.5)
Additional Flexibility in Pricing IT/ STFT (9.5)
ROE Fixed for Multi-Year Toll Period (9.5)
TransCanada Recommended Return under CAPP Proposal[1]
13.62%[2]
11.5%[3]
9.5%[4]
RH-2-94 Formula[5]

Notes:
1. TransCanada did not recommend a precise rate of return for the CAPP proposal, but noted the required return would be higher than the fair return under the Status Quo (See section 9.5) (Not to scale)
2. TransCanada recommended return on equity under the Status Quo (Implied based on an ATWACC of 7.625 per cent, 40 per cent equity thickness and ATWACC assumptions discussed in 9.4.3)
3. Return on equity set by the Board (See section 9.5)
4. Return on equity recommended by CAPP under CAPP proposal (See section 9.5)
5. RH-2-94 Formula (with 36 per cent equity thickness – as in RH-2-2004 Phase 2) (Not to scale)

*Dr. Vilbert's Direct CAPM estimates (scenario 1 and scenario 2) for the pipeline sample adjusted upwards to recognize DCF results from other samples (See section 9.4.1)

Legend: The size of the arrows has no implication for quantitative contribution to the Board's decision. Arrows positioned to show movement from a starting point. (Not to scale)

Material Influence | Limited Influence | ♦ No Influence

Chapter 10

2011 Mainline Revenue Requirement

On 9 September 2011, the Board issued its letter decision on TransCanada's application for Mainline Final 2011 Tolls. The Board decided that the 2007-2011 Mainline Settlement would apply for the purpose of determining the Mainline 2011 revenue requirement.

The Board stated that certain 2011 Mainline costs or cost parameters that are predetermined by the Settlement would not be tested further. These included OM&A costs, the Performance Incentive Envelope programs, depreciation rates and the segmented approach to depreciation, rate of return on common equity, capital structure and the use of the weighted average cost of debt, and the treatment of the 8.25 per cent junior subordinated debentures.

However, the Board stated that it required a more detailed evidentiary record before deciding on certain of the "flow through" elements of the 2011 Mainline revenue requirement such as the continuing prudence of the TransCanada TBO arrangements and the amount of "used and useful" rate base. The Board directed TransCanada to file additional evidence as part of this proceeding. This became Issue 9 on the List of Issues.[68]

The Board also stated that once the final 2011 Mainline revenue requirement is determined, any surplus or shortfall that results from final 2011 tolls would be placed in a deferral account for consideration in 2012 or subsequent years.

In response to the Board's direction, TransCanada provided additional information on "flow through" elements of the 2011 revenue requirement. TransCanada stated that the revised 2011 revenue requirement is $1,897 million, an increase of $13 million relative to the revenue requirement included in the Mainline Final 2011 Tolls application as filed. In March 2012, TransCanada again revised the 2011 revenue requirement based on actual 2011 costs. The revised revenue requirement was $1,895 million, a decrease of $1.1 million. TransCanada estimated that compared to the revenues from tolls charged in 2011, a revenue shortfall of $215.3 million will result. TransCanada included this shortfall in Regulatory Amortizations for the 2012 Test Year.

TransCanada noted in argument that the Board did not receive any evidence about Issue 9 from intervenors. There was no evidence contesting the 2011 TBO arrangement or the amount of "used and useful" rate base in 2011. TransCanada's position, therefore, was that there was no evidentiary basis for the Board to approve anything other than the amounts applied for by TransCanada.

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[68] Issue 9 refers to the appropriateness of the "flow through" elements of the 2011 Mainline revenue requirement, including the continuing prudence of TransCanada's Transportation by Others arrangements and the amount of "used and useful" rate base.

APPrO confirmed that it would take no further positions on 2011 flow through costs, preferring to focus on solutions going forward rather than reviewing past decisions.

Views of the Board

We have examined TransCanada's calculation of the 2011 revenue requirement and note that no party opposed the applied-for amounts. In accordance with the Board's earlier decision, the revenue shortfall that results from 2011 final tolls should be disposed of in the 2012 revenue requirement.

Decision

We approve the applied-for amount for the 2011 revenue requirement and the amortization of the revenue shortfall that results from final 2011 tolls in the 2012 revenue requirement.

Chapter 11

2012-2013 Mainline Revenue Requirements

Under its Restructuring Proposal, TransCanada proposed to recover Mainline net revenue requirements of $1,139.3 million and $1,172.3 million in 2012 and 2013 tolls, respectively. The components of these net revenue requirements are presented in Table 11-1.

Table 11-1 Proposed 2012 and 2013 Mainline Revenue Requirements ($000)

	2012 Test Year	Change	2013 Test Year
Transportation by Others	169,153	(29,469)	139,684
Storage Operating Costs	15,742	396	16,138
Pipeline Integrity and Insurance Deductible Costs	94,601	3,823	98,424
NEB Cost Recovery	8,398	254	8,652
Return	475,796	(2,936)	472,860
Income Taxes	158,132	33,919	192,051
Depreciation	287,085	6,040	293,125
Regulatory Proceeding Costs and Collaborative Costs	1,810	(1,350)	460
Electric Costs and Tax on Fuel	28,506	4,583	33,089
Municipal and Provincial Capital Taxes	124,582	4,288	128,870
Regulatory Amortizations	174,405	(174,405)	0
Operations, Maintenance and Administrative	174,501	(714)	173,787
Long-Term Adjustment Account	(98,062)	102,317	4255
TransCanada Contribution	(25,000)	0	(25,000)
Gross Revenue Requirement	**1,589,649**	(53,254)	**1,536,395**
Miscellaneous Revenue			
Non-Discretionary Miscellaneous Revenue	(18,027)	(6,833)	(24,860)
Discretionary Miscellaneous Revenue	(432,361)	93,174	(339,187)
Total Miscellaneous Revenue	(450,387)	86,340	(364,047)
Net Revenue Requirement	**1,139,262**	33,086	**1,172,348**

Transportation by Others, Pipeline Integrity and Insurance Deductible Costs, Deferral Accounts and the TransCanada Contribution are discussed in this chapter. Return, related cost of capital matters, Depreciation and the Long-Term Adjustment Account are discussed in various other chapters of this Decision.

11.1 Uncontested Costs

The 2012 and 2013 applied-for amounts for Storage Operating Costs, NEB Cost Recovery, Regulatory Proceeding Costs and Collaborative Costs, Electric Costs and Tax on Fuel, Municipal and Provincial Capital Taxes, Regulatory Amortizations, Operations, Maintenance and Administrative costs were not opposed by parties.

Decision

We approve the 2012 and 2013 proposed amounts for Storage Operating Costs, NEB Cost Recovery, Regulatory Proceeding Costs and Collaborative Costs, Electric Costs and Tax on Fuel, Municipal and Provincial Capital Taxes, Regulatory Amortizations, and Operations, Maintenance and Administrative costs.

11.2 Transportation by Others

TransCanada has TBO agreements on pipeline systems owned by GLGT, Union and TQM that are in effect for 2011, 2012 and 2013. The Mainline's 2011 TBO costs were examined as part of the RH-003-2011 proceeding pursuant to the Board's decision approving Final Mainline 2011 tolls on 9 September 2011. As set out in the Board's RH-4-93 Decision, TransCanada does not require Board approval to enter into TBO agreements. Instead, the Board examines the prudence of Mainline TBO costs when TransCanada applies to recover costs associated with those contracts in tolls.

TransCanada applied to recover TBO costs for 2011, and the 2012 and 2013 test years as set out in the Table 11-2.

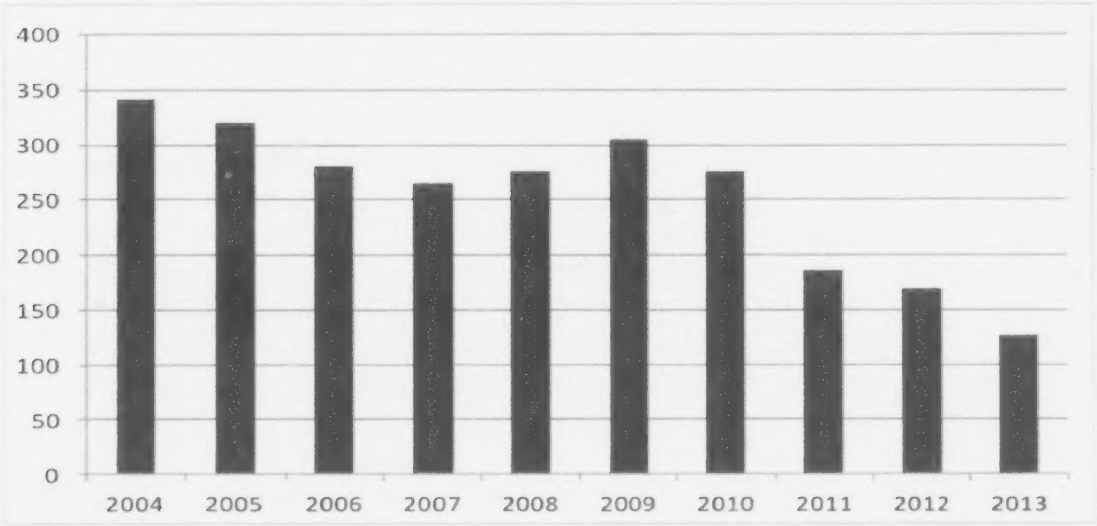
Table 11-2 TBO Costs in the Mainline Revenue Requirement ($ million)

TBO Agreement	2011	2012	2013
GLGT	69.0	58.4	23.9
Union	38.0	30.0	22.5
TQM	78.0	80.0	79.0
Total	**185.0**	**168.4**	**125.4**

These amounts reflect TransCanada's *net* forecast of TBO costs. TransCanada releases (resells) TBO capacity that it contracts for, but does not ultimately require. For 2012 and 2013, TransCanada has proposed that all amounts it recovers through capacity releases will be credited to the Mainline's revenue requirement thereby offsetting the Mainline's cost of TBO service.

TransCanada provided a table showing total Mainline TBO costs from 2004 to 2013 to illustrate the substantial reduction in these costs that has taken place over time. TransCanada submitted that between 2010 and 2013, it has reduced its total TBO costs for GLGT, Union and TQM TBO capacity by $148.1 million per year.

Figure 11-1 Total Mainline TBO Costs: 2004 – 2013



Views of TransCanada

TransCanada stated that it considers its aggregate requirements before contracting for service on other pipelines. TransCanada stated that it enters into TBO agreements to meet its aggregate requirements, not the requirement of any one shipper, adding that an FT shipper could independently contract for capacity on a TBO pipeline that is not contracted to others.

TransCanada submitted that there is no formulaic or mechanistic approach to determine the right amount of TBO capacity to hold. TransCanada noted that the Board's RH-1-2002 Decision enables TransCanada to consider the aggregate demands of its entire suite of services, including discretionary services, when determining the amount of capacity to renew.

TransCanada has multiple TBO agreements with GLGT that are effective during 2011, 2012 and 2013. Each of the agreements allows TransCanada to transport gas on the GLGT system and is renewable by TransCanada upon it giving GLGT one year's notice. Of significance is that the GLGT TBO agreements differ on the amount of gas that TransCanada is allowed to transport and the transportation service that is provided. Under the GLGT TBO agreements, forward haul service is provided between Emerson and St. Clair or Emerson and Sault Ste. Marie, and backhaul service is provided between St. Clair and Emerson or St. Clair and Sault Ste. Marie.

Views of Intervenors

APPrO

APPrO called for the elimination or phase-out of all TBO on the Mainline. APPrO suggested that shippers contract directly with the TBO pipelines, if required. To the extent that TransCanada continued to offer transportation on paths requiring TBO agreements, APPrO suggested that TransCanada impose a surcharge on shippers using those paths so the only shippers paying costs associated with TBO agreements would be ones who specifically use those transportation services. APPrO submitted that spreading TBO costs across all shippers results in subsidies. APPrO submitted that if a TBO surcharge were implemented, then the Mainline revenue requirement for FT tolls would be reduced by $94 million.

Union[69]

GLGT Forward Haul

Union stated that TransCanada has been contracting for more forward haul capacity than it required to service its long-term FT contracts. Speculative contracting, in Union's view, is contrary to TransCanada's stated policies and practices. Union submitted that speculative TBO contracting was evident in 2011, 2012 and 2013, as described below:

1. For 2011, Union noted that TransCanada contracted for 698,727 MMBtu/d of GLGT forward haul capacity when its firm contract haul requirements were 27,986 MMBtu/d. Union pointed out that volumes in excess of firm forward haul requirements had to be released.

2. For 2012-2013, Union noted that when TransCanada contracted for 100,000 Dth/d of GLGT forward haul capacity it did not have any underlying FT obligations supporting TBO contracts. Union submitted that TransCanada breached its own policies and practices when it entered into this TBO contract because it was not required to meet firm contractual obligations.

Union submitted that the shippers bear the risk of TBO cost recovery and that new TBO contracts should be entered into to meet long-term FT requirements, not discretionary services.

GLGT Backhaul

(i) Not bearing costs of the backhaul path

Union claimed that gas using the GLGT backhaul contract fails to bear the same fair share of costs as is borne by other firm services using the same facilities over the same path. This, in Union's view, raises issues about affiliate transactions, undue preferences, undue discrimination and toll discounting in contravention of section 62 of the NEB Act.

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[69] Evidence filed on behalf of MAS deals with the issue of Mainline TBO costs; however, in this Chapter we refer only to Union because Union was the most active of MAS' members on this issue.

Union submitted that the use of the backhaul path only recovered a fraction of the total cost that would be incurred if TransCanada were to physically flow gas along the backhaul path. Union provided a toll and fuel comparison on the Dawn to Enbridge CDA path to illustrate that cost per unit of gas flowing directly on the path was $0.23/GJ compared to the $1.388/GJ cost of facilities involved using the backhaul path. Union submitted that if TransCanada were going to offer the backhaul path for $0.23/GJ, then Union would want a similar consideration for other locations along that path.

Union contended that volumes have been free riding backhaul across GLGT and the NOL. It noted that the GLGT backhaul contract embarked volumes on a 3,800 km path, to transport gas 234 km. Union argued that this new path should be tolled like another operational path and, paraphrasing section 62 of the NEB Act, that the same traffic over the same route shall be charged equally to all persons at the same rate.

(ii) Abuse of market power

Union asserted that TransCanada has abused its market power. Union pointed out that it is required to sign ten-year contracts with TransCanada to support the construction of new facilities; however, there is no guarantee that TransCanada will build the facilities. Union referred to the bid it had submitted in the Mainline's 2012 Open Season, which was rejected because TransCanada did not agree to Union's condition that new facilities be built if Union entered into a ten-year contract. Union submitted that if TransCanada continues to move gas using the GLGT backhaul path, then Union requests full discovery as to why that path is a more cost effective option.

Union submitted that TransCanada did not contractually backstop new facility construction that enabled GLGT to reverse flow. Union argued that this differing treatment constituted unjust discrimination. Union pointed out that TransCanada had to construct new facilities at Dawn and Emerson to enable it to utilize the GLGT backhaul path. Union contented that when constructing the physical backhaul capability from St. Clair to Emerson, TransCanada did not require a ten-year contract to backstop the facility construction. This, according to Union was a breach of an established TransCanada policy, which required a ten-year minimum contract term for new facilities construction.

In summary, Union argued TransCanada is exercising monopoly power by preventing LDCs access to new gas supplies. It argued TransCanada's delay in constructing new facilities compels Union and Gaz Métro to source uncompetitive long-haul gas supply from Empress.

Union's requests of the Board

Union contended that TransCanada failed to discharge its onus to demonstrate that TransCanada's TBO contracts were reasonable and prudent such that all related costs should be recovered. Union submitted that TransCanada does not enjoy the presumption of prudence with respect to GLGT contracting. Union further contended that TransCanada, by failing to present argument on this issue, failed to discharge its onus of proof, and it was unfair for TransCanada to provide reply argument to Union's argument regarding GLGT TBO.

Notwithstanding these submissions, Union did not request any disallowances associated with TransCanada's contracts with GLGT for backhaul service and did not seek a specific disallowance for TBO contracts related to TransCanada's 2011 revenue requirement. The only specific disallowance requested by Union was for 2013 in respect of TransCanada's TBO of 100,000 Dth/d forward haul service on GLGT.

Union submitted that there was a need for preventative action to deal with future TBO contracts, and that there was a need for a corrective action within the test period. In terms of preventative action, Union asked that TransCanada's conduct with GLGT must receive full transparency, and to that end, the Board must require TransCanada to get prior approval of all GLGT contracts.

For corrective action, Union requested that the Board right size TransCanada's GLGT contract for forward haul service. Union noted that there is a reduction option in TransCanada's contract with GLGT, which allows it to reduce the volumes under contract. Union requested that approval of GLGT costs be limited to only what is required for TransCanada's long-term forward contract requirements (that is, 40,000 GJ/d, which ends on 31 March 2013). Further, Union requested that the Board disallow costs of the 100,000 Dth/d forward haul contract after 31 March 2013, as TransCanada does not have any firm obligations underpinning the capacity for the remainder of the term of the contract. Union advocated that the Board should disallow these costs as soon as possible, by issuing a decision with reasons to follow.

Ontario

Ontario noted that TransCanada has reduced its contracted capacity on GLGT and Union resulting in an annual reduction of $59 million in GLGT TBO costs and an $11 million reduction in Union TBO costs. Ontario stated that it was supportive of TransCanada's efforts to "right-size" its TBO contract volumes on the GLGT and Union systems and encouraged TransCanada to review and adjust its volumes on an annual basis.

TransCanada's Reply

(i) Elimination of all TBO and surcharge

TransCanada submitted that it cannot abrogate or unilaterally amend TBO contracts to which it has committed. It noted that eliminating the TBOs would result in its service requirements not being met. TransCanada contended that it would be difficult to implement a surcharge for GLGT and Union TBOs. TransCanada submitted that there are multiple routes that gas can travel on its system, which may or may not include a third-party pipeline, and since it does not colour code molecules on its system, determining what gas to surcharge would be a "challenging endeavour".

(ii) GLGT forward haul

TransCanada pointed out that from 2010 to 2013 it reduced its total TBO costs for GLGT by 90 per cent. This resulted in a reduction in annual GLGT TBO costs from $142.7 million in 2010 to $23.9 million in 2013.

TransCanada submitted that the current 100,000 Dth/d of Emerson to St. Clair capacity is an appropriate level of GLGT TBO to hold. TransCanada noted that maintaining this capacity provides it with additional operational flexibility. For example, it allows TransCanada to meet its aggregate transportation requirements, including the ability to provide STS injection service at Dawn for STS contract holders, and facilitates the transportation of additional discretionary service to and from the Dawn area, which can further contribute to lower tolls. As an example, TransCanada referred to a new one-year FT agreement it signed, effective 1 April 2012 to 31 March 2013 for 40,000 GJ/d from Empress to Union SWDA. The cost of that agreement was $10 million, but its existence has enabled TransCanada to generate in excess of $27 million based on current interim rates.

(iii) GLGT backhaul

TransCanada stated that availability of backhaul service on GLGT helps TransCanada meet its eastern capacity requirements without the need for a large capital outlay. TransCanada contended that its analysis showed that contracting for St. Clair to Emerson service resulted in an overall lower annual cost of service, than constructing new facilities. TransCanada rejected the assertion that avoiding the backhaul would result in potential savings. TransCanada submitted that the assertion is not based on operational or tolling facts, but rather a fiction that has been promulgated by Union to give the incorrect impression that use of Union TBO is a lower-cost method of transporting gas than TransCanada's current arrangements.

TransCanada stated that the backhaul service is typically provided via a displacement or an exchange with the GLGT forward haul nominations by other GLGT shippers, which has the effect of reducing the net distance that gas is transported, resulting in fuel savings for not only GLGT shippers but Mainline shippers as well. TransCanada pointed out that Union itself noted in its response to a TransCanada information request that gas has physically travelled from Dawn to TransCanada's St. Clair lateral at Dawn (Dawn TCPL) only three days since the contract came into effect in November 2010.

In response to Union's analysis that the use of backhaul on GLGT was inefficient, TransCanada stated that given the integrated nature of the Mainline system, it first finds the lowest cost way to meet its aggregate requirements. Having determined the lowest cost way to expand capability on the system, TransCanada then calculates a toll for the service, and it does this using the same approach for all the services on the integrated system. The costs are rolled into a system-wide cost and then allocated to the path between the receipt and delivery point on the appropriate basis, which for short-haul paths is the shortest distance, not the longest distance around the backhaul path. TransCanada pointed out that Union was the only party that raised this issue because use of the GLGT backhaul service allows TransCanada to use existing infrastructure to provide less costly service to Ontario rather than purchasing more M12 service on Union and having Union duplicate Ontario's gas transportation infrastructure.

(iv) Abuse of market power

TransCanada stated that it did not require ten-year contracts for the backhaul path as there was no new shipper requesting incremental service from Dawn. The backhaul contract was put in place to meet its existing requirements that could not be met via exchange of volumes delivered into Dawn.

Union's relief request

TransCanada submitted that there was simply no basis to regress 20 years to the pre-RH-4-93 days and require pre-approval of GLGT or any other TBO decisions. TransCanada further stated that even more so now than in the past, TransCanada requires agility in its contracting and service decisions; adding that this is not the time to put regulatory obstacles in the way of TransCanada capturing markets that might be lost if regulatory hurdles need to be cleared before the opportunity can be secured.

Addressing Union's request of disallowing part of the cost of the 100,000 Dth/d contract, TransCanada questioned how the Board could justify ruling that the cost of the contract was prudent at the time it was made, and that TransCanada could recover its costs up to 31 March 2013, but deem the same cost imprudent and disallowed at a later date. In TransCanada's view, that is not how prudence decisions are made.

Views of the Board

APPrO and Union challenged the amount of TBO costs included in the Mainline's revenue requirement and how the Board approves the Mainline's TBO costs.

We do not agree with APPrO that all TBO agreements should be eliminated or tolled on a surcharge basis. In our view, the evidence demonstrates that TBO agreements are required for TransCanada to meet its delivery obligations under existing FT contracts, in addition to its other delivery requirements for discretionary services. Requiring TransCanada to eliminate all TBO agreements at this time could reduce the Mainline's operational flexibility and may cause a reduction in Mainline billing determinants. We are also of the view that it would be not only difficult to implement a toll surcharge but it would be an unnecessary restriction on the Mainline. This is so because of the fact that the GLGT and Union TBO agreements function as operational loops of the Mainline, and the reality that the Mainline can operationally meet the same delivery obligation by flowing gas on TBO or non-TBO paths.

We are of the opinion that TransCanada has appropriately "right-sized" the amount of forward haul GLGT TBO capacity that it has contracted for in 2011, 2012 and 2013. In reviewing the contracted volumes, we recognize that there is a lag between the renewal terms of GLGT contracts and the renewal terms for Mainline FT service. In our view, it is significant that TransCanada has decreased its GLGT forward haul volume by about 90 per cent between 2011 and 2013. This is shown in Table 11-3, which summarizes the volumes associated with TransCanada's GLGT TBO agreements.

Table 11-3 GLGT TBO Volumes (Dth/d) by Path

	Forward Haul		Backhaul	
	Emerson to St. Clair	**Emerson to Sault Ste. Marie**	**St. Clair to Emerson**	**St. Clair to Sault Ste. Marie**
1 Jan. 2011 to 31 Oct. 2011	935,965	25,000	313,727	-
1 Nov. 2011 to 31 Oct. 2012	673,727	25,000	313,727	-
1 Nov. 2012 to 31 Dec. 2013	100,000	-	160,000 (summer) 123,962 (winter) 313,727	36,038

For 2013, one GLGT forward haul TBO agreement for 100,000 Dth/d remains in effect. We are of the view that it was appropriate for TransCanada to enter into this 100,000 Dth/d contract with GLGT. We recognize that TransCanada did not have any FT obligations requiring the use of this TBO contract at the time it made the decision to enter into the TBO contract. However, the evidence indicates that TransCanada considered its aggregate delivery requirements, and the importance of maintaining connectivity with the Dawn hub, when it decided to enter into this contract. This approach was consistent with the Board's RH-1-2002 Decision where the Board noted that in addition to its firm commitments, TransCanada is also entitled to consider transportation demands for discretionary services when deciding how much TBO to contract. Accordingly, we will not disallow costs associated with this agreement and will not order TransCanada to exercise its "reduction option," as requested by Union.

We find TransCanada's GLGT backhaul contracting and tolling practices to be appropriate. We do not share Union's view that TransCanada's tolling methodology for the GLGT backhaul path is contrary to section 62 or section 67 of the NEB Act, or that it should apply to other points or destinations along the backhaul route. The record demonstrated that the backhaul path has been used physically only three times in history. We understand that the backhaul GLGT TBO capacity is primarily used as a mechanism to enable the exchange of gas with GLGT. The backhaul GLGT TBO is so infrequently used as a physical path that tolling it on the basis of a longer distance would disregard how the system operates. Moreover, we find that TransCanada's use of the backhaul GLGT TBO is more cost effective than constructing new facilities. The backhaul GLGT TBO reduces the total distance that gas must travel to reach its destination on a system wide basis. In our view, there is much merit in TransCanada's approach of using existing infrastructure to meet aggregate delivery requirements. Accordingly, we do not find TransCanada's tolling of this path discriminatory, unreasonable or inappropriate.

We will not require TransCanada to seek pre-approval from the Board before it enters into TBO agreements with affiliates. We agree with TransCanada that in the current business environment the Mainline requires more flexibility and agility to respond to increasing competition. This is recognized in Chapter 8 of this Decision, which provides our reasons in respect of TransCanada's service and pricing proposals. In our view, imposing a TBO pre-approval policy on TransCanada would be inconsistent with giving TransCanada flexibility to enable it to respond to competition. Costs related to TransCanada's TBO contracting decisions for the Mainline will continue to be examined by the Board pursuant to the process set out in the Board's RH-4-93 Decision.

As for Union's argument that it was procedurally unfair for TransCanada to provide reply argument to Union, we find that it was not unreasonable for TransCanada to say little about GLGT TBO costs in its argument in chief because prior to argument, Union made clear that it was not challenging the prudency of the GLGT TBO costs in this proceeding.

We have reviewed the TBO amounts that TransCanada applied to include in the Mainline's revenue requirement for 2011, 2012 and 2013, and, we approve them. We recognize that TransCanada may not have made decisions about the level of TBO beyond 31 October 2013, and that the amounts included in the Mainline's revenue requirement for 1 November 2013 to 31 December 2013 are placeholders.

Decision

We approve the TBO amounts in the Mainline revenue requirement for 2011, 2012 and 2013 as set out in our views above.

11.3 Pipeline Integrity and Insurance Deductible Costs

TransCanada submitted that the objective of its Pipeline Integrity Program is to ensure the safety, reliability and compliance with regulatory requirements of its pipeline system. TransCanada stated a risk assessment is performed annually which is used to identify potential integrity threats and initiate inspection/mitigation activities and for forecasting expenditures for future years. The Program is adjusted throughout the year based on findings from on-going assessments. TransCanada stated the Program consists of expense and capital spending required to maintain the physical integrity of the pipeline system.

TransCanada submitted that while pipeline integrity spending levels are dictated by the integrity threats facing the pipeline, it continues to look for improvements in program development and implementation. As a result of the lower contract and throughput levels on the Mainline, TransCanada undertook an economic analysis on whether to continue the integrity program on Line 2 across northern Ontario given that it had isolated or operated at reduced pressure several sections on Line 2 in that region. At the time of submitting its application, TransCanada indicated that the analysis showed returning the line to full service would result in a net cost savings to shippers because of reduced fuel consumption. However, in light of changes to its

revised Throughput Study, TransCanada announced during the proceeding that it was reassessing its pipeline integrity activities in northern Ontario. TransCanada suspended all further planned integrity work on Line 2 in northern Ontario except for those activities already underway. TransCanada indicated that this would result in a reduction of approximately $13 million to its forecast 2012 integrity costs. TransCanada will determine what integrity work on Line 2, if any, still results in a net benefit to shippers at current projections of throughput and prices and will review the results with the Tolls Task Force prior to reinstituting any suspended work. By deferring the integrity work, TransCanada confirmed that it was not operating its system in any manner that is unsafe and that it is putting safety first. TransCanada also affirmed that it will continue to maintain integrity and public safety in all circumstances it may face with respect to the NOL.

Views of the Board

Pipeline safety is of paramount importance to the NEB, and it will take all available actions to protect Canadians and the environment. The NEB requires pipeline companies to anticipate, prevent, manage and mitigate potentially dangerous conditions associated with their pipelines. The Board expects regulated companies to invest the resources required to ensure safe operation, environmental protection and full regulatory compliance at all times. We note TransCanada's commitment to ensuring public safety and expect TransCanada to continue to invest in pipeline integrity in order to achieve excellent levels of safety for all pipeline segments. Should the NEB become aware of any actions that compromise public safety, the Board will not hesitate to impose appropriate corrective actions.

Considering the lower throughput and the fact that a reduction to the forecast 2012 amount related to the suspended work on NOL Line 2 would not impact safety or security of the pipeline, we find the proposed amounts for pipeline integrity costs to be appropriate.

Decision

We approve the 2012 proposed amount for Integrity costs less a reduction of $13 million for the suspended work on NOL Line 2 and approve the 2013 proposed amount.

11.4 Deferral Accounts

TransCanada requested the continued use of its flow-through deferral accounts for the 2012 and 2013 Test Years. TransCanada also requested a single consolidated revenue deferral account that will replace the previously approved deferral accounts for Firm Service Revenues, Discretionary Revenues, Non-Discretionary Revenues, Union Dawn Receipt Point Surcharge and Interim Revenue Adjustment Variance in place for 2010 and 2011. TransCanada explained that the use of a single revenue deferral account to capture the variance between actual revenue and the approved revenue requirement would simplify the revenue deferral calculation and related procedures for tracking and reporting revenue deferrals.

Under its expense deferral accounts, TransCanada proposed to eliminate the following accounts: Compressor Repair and Overhaul Costs, Union Dawn Receipt Point Surcharge and three deferral accounts that were previously approved in its 2007-2011 Settlement Application and that are not required under this Application (Performance Incentive Envelope, OM&A and Interest Rate Management Program).

No Intervenors addressed these specific requests by TransCanada. However, as explained in Chapter 12, CAPP recommended a multi-year approach to setting tolls that included a TSA deferral account where differences between revenue collected and the revenue requirement would be captured. CAPP submitted that its proposed TSA would replace TransCanada's proposed STAA.

Views of the Board

In Chapter 12, we have decided to adopt a multi-year approach to setting tolls and to establish the TSA. The TSA will capture the cumulative annual differences between actual total revenues and actual total costs (net of any payments under the incentive mechanism described in Section 12.3). As a result, the TSA will effectively subsume all of TransCanada's existing Mainline deferral accounts. TransCanada will continue to file detailed cost and revenue information in its quarterly surveillance reports in accordance with Guide BB of the NEB Filing Manual, and will continue to keep detailed accounts in accordance with the GPUAR. Based on these factors, we do not see a need for TransCanada to have any deferral accounts other than the TSA.

Decision

TransCanada's only deferral account will be the TSA, described further in Chapter 12.

11.5 TransCanada Contribution

As part of the package of proposals in its Application, TransCanada proposed to make a voluntary contribution of $25 million to reduce the Mainline revenue requirement for each of 2012 and 2013. TransCanada noted that its contribution is not specific to any category of the revenue requirement and that it is contingent on the approval of the Restructuring Proposal. Further, TransCanada stated this voluntary contribution is a direct corporate contribution towards achieving an objective that, in addition to being in the public interest, is in TransCanada's own interest.

APPrO proposed that TransCanada make a $250 million contribution over five years to reduce the revenue requirement. Enbridge stated that TransCanada's contribution would be both insufficient and ineffective.

Tenaska submitted that TransCanada's contribution of $25 million for each of the test years should be interpreted as an acknowledgement by TransCanada that its applied-for revenue requirement is in aggregate $25 million too high. Tenaska argued that the Board should accept

that acknowledgment and take the $25 million out of the revenue requirement regardless of what it decides on any of the other elements of the Application.

Ontario recognized the conditional nature of TransCanada's contribution and encouraged TransCanada to follow through on its proposal.

In reply, TransCanada noted that the contribution is voluntary and argued that the Board cannot do as Tenaska suggested, which is to require TransCanada to contribute the $25 million regardless of whether the Restructuring Proposal is approved.

Views of the Board

TransCanada's proposed voluntary contribution was contingent on the Restructuring Proposal being approved. We have not approved all of the elements of the Restructuring Proposal as filed by TransCanada. The contribution had no effect on the determinations we have made in this proceeding.

Chapter 12

Multi-Year Fixed Mainline Tolls

12.1 Proposed and Competitive Mainline Tolls

12.1.1 Proposed Tolls

TransCanada and several intervenors submitted toll estimates based on various scenarios. The following are select long-haul and short-haul tolls put forth by the parties in this proceeding. The tolls are not directly comparable to each other, in large part because parties employed different assumptions. For example, MAS calculated the tolls under its proposals using an assumed ROE of 7.76 per cent, whereas TransCanada calculated its Restructuring Proposal tolls using the equivalent of an ROE of 12.05 per cent. Other differences included the precise path and test year presented, and the inclusion of other charges such as, where applicable, the Alberta System FT-D1 toll and delivery pressure surcharges. There was also a significant amount of discussion regarding parties' varying discretionary revenues assumptions.

Given that in this Decision we deny a number of aspects of TransCanada's Restructuring Proposal, the following also describes some of TransCanada's submissions on the impacts of individual aspects of the Restructuring Proposal.

Views of TransCanada

TransCanada submitted proposed tolls for both its Restructuring Proposal and the Status Quo case. The tolls for two selected paths are shown in Table 12-1.

In addition to the toll levels for the Restructuring Proposal and Status Quo cases, TransCanada submitted estimates of the changes to those tolls that would result from adding each of the major components of its Restructuring Proposal to the Status Quo case, and from removing each of the major components from the Restructuring Proposal. These estimates ignored the throughput changes that could result from adding or removing a given component. TransCanada estimated that, for example, if only the ASE were removed, the NIT to Dawn toll would rise by $0.25/GJ from the RP level of $1.47/GJ. As another example, TransCanada estimated that removing only the Depreciation proposal from the Restructuring Proposal would increase that toll by $0.14.[70]

TransCanada did not estimate the combined impact of removing both the ASE and deprecation proposal from the RP. Adding the impact of the individual toll impacts does not produce valid estimates of their combined impact, because an aggregation effect also needs to be considered. In the case of the estimates of the impacts of removing each of the individual components from the

[70] If the impact were measured in the opposite direction, that is, if only the ASE were added to the SQ, TransCanada estimated this would decrease the NIT to Dawn toll by $0.61/GJ from $2.74/GJ; adding only the depreciation proposal to the SQ would lower that SQ toll by $0.23/GJ.

RP, the sum of TransCanada's estimated changes from all of the components equaled $0.66/GJ for the NIT to Dawn toll. Adding this to the RP toll of $1.47/GJ equals $2.13/GJ, which is $0.61/GJ lower than the SQ toll level of $2.74. This $0.61/GJ gap corresponds to the aggregation effect[71], which captures interactions between the various RP components and the impact of the estimated throughput differences between the RP and SQ cases.

As described in Section 7.3, TransCanada also estimated that the isolated impact of removing the TQM TBO proposal from the RP would be an increase in 2012 tolls for non-TQM services of approximately $0.01 to 0.03/GJ (two to 15 per cent). TransCanada did not provide an estimate of the isolated toll impact of its proposed $25 million voluntary contribution for each of 2012 and 2013.

Views of Intervenors

A number of intervenors submitted toll estimates for their proposals. Table 12-1 shows a selection of these tolls.

Table 12-1 Tolls Submitted by TransCanada and Intervenors

Test Year	Proposal	Long Haul Path	Long Haul Toll ($/GJ)	Short Haul Path	Short Haul Toll ($/GJ)
2013	**TransCanada** Status Quo	NIT to Union SWDA	2.74	Dawn to EGD CDA	0.34
2013	**TransCanada** Restructuring Proposal	NIT to Union SWDA	1.47	Dawn to EGD CDA	0.23
2012	**APPrO** ATM	NIT to Union CDA	0.75	Union SWDA to EGD CDA	0.08
2012	**IGUA** Option 5	SMB to Union SWDA	0.79	Union SWDA to EGD CDA	0.22
2013	**MAS** Alternative	SMB to Eastern Zone	1.24	Union SWDA to EGD CDA	0.16
2013	**CAPP** Multi - Year	NIT to point 3,000 km from Empress	1.69	*Not provided*	*N/A*

12.1.2 Competitive Mainline Toll Level

Views of TransCanada

TransCanada indicated that since the first review of Mainline tolls, the environment in which TransCanada has operated has evolved, sometimes rapidly, to an increasingly competitive North American and global market. TransCanada noted that the commencement of service in 2000 on the Alliance and Vector pipelines created a new and competitive path to take significant WCSB

[71] TransCanada submitted that the aggregation effect was $0.62/GJ, but indicated that numbers may not add due to rounding.

gas to markets that had traditionally been served by the Mainline, and that the message from the RH-1-2001 Decision was that TransCanada needed to become more competitive in the future. TransCanada noted that over the past few years, it proposed new services and alternate service terms and conditions intended to optimize the utilization of existing facilities, reduce costs, and to adjust service terms, all with a view to enhancing the viability and competitive position of the Mainline. Included in these historical proposals were the redeployment of natural gas pipeline assets to oil service, the North Bay Junction application, the Southwest Zone application, and an application to increase depreciation rates. Now, according to TransCanada, more broad-based and comprehensive initiatives are needed to respond to the current market conditions.

In TransCanada's view, historically low basis differentials between western Canada and eastern markets are indicative of the increasingly competitive North American natural gas market. TransCanada indicated that the basis differential (a proxy, according to TransCanada, for the relative competitiveness of the Mainline tolls) between the NIT and Dawn has decreased from a high of $1.76/GJ in 2005 to $0.84/GJ in 2010. This has negatively impacted the economics of transporting WCSB gas to eastern markets. TransCanada indicated that while the annual average basis differential is lower now than at any time since 2004, the Mainline toll between NIT and Dawn is higher than it was ten years ago. Thus, the basis differential as a percentage of the NIT to Dawn toll has fallen significantly, from 119 per cent in 2005 to 34 per cent for the first six months of 2011. Additionally, the abundance of natural gas supplies has also resulted in a reduction of the magnitude and frequency of basis "blowouts", where the price in one region separates significantly from prices in other locations. As a result of the reduction in basis blowouts, the value to parties in holding FT over long-haul paths to hedge against such pricing situations has declined.

According to TransCanada, immediate action needs to be taken to address the long-term economic viability of the Mainline and other infrastructure in relation to the new market reality. The impact on tolls of reduced volumes, increasing supply options, and changes in contracting practices is immediate and would intensify in the near term if the Status Quo prevailed.

TransCanada submitted that implementing the Restructuring Proposal would enhance the long-term economic viability and competitiveness of the Mainline, other TransCanada systems, and the WCSB as a whole. With the Restructuring Proposal, producers would benefit from enhanced competitiveness of the WCSB, improved connectivity to markets, higher NIT prices and higher netbacks. Further, shippers and marketers would benefit from lower and more stable Mainline tolls. Consumers would benefit from lower Mainline tolls, lower gas costs at Dawn, and continued competitive access to Canadian gas supplies. Additionally, TransCanada submitted that reducing the Mainline long-haul tolls would minimize or reduce bypass threat from the U.S. northeast.

TransCanada indicated that the Restructuring Proposal makes WCSB gas more competitive in eastern markets by reducing long-haul tolls in the near term and by reducing the expected volatility and uncertainty in tolls longer term. TransCanada indicated that the ability to compete is to a large extent a question of appropriate tolling. Improved competitiveness of the Mainline as a result of the Restructuring Proposal may not mean that WCSB gas shipped on the Mainline will compete successfully with Marcellus gas in Pennsylvania or New York, but a more competitive

Mainline will better enable WCSB gas to compete with Marcellus gas as Marcellus gas reaches for markets outside its own local market.

TransCanada submitted that the long-haul NIT to Dawn toll relative to the basis differential was not an appropriate measure of the toll's long-term competitiveness. TransCanada indicated that in evaluating its long-term competitiveness, it considers the toll for its transportation versus its competitors into the same market area (net forward analysis), the toll for its transportation versus its competitors out of the same supply area (netback analysis), and the toll for its transportation versus its competitors from the same supply area to the same market area. While price differentials are a key part of valuing capacity, security of market or supply, access to market or supply, and quality of service(s) must also be considered in valuing pipeline capacity. TransCanada suggested that the Mainline's competitiveness can be looked at both in terms of competing in the current environment with other sources of gas, and in a longer term context where the goal is to be competitive with proposals for other substantial bypasses in the east.

TransCanada projected the price differential between NIT and Dawn would average $0.71/GJ from 2012 to 2017. Although TransCanada expected that, on an annual average basis, the proposed Restructuring Proposal tolls would still exceed the expected basis differential from NIT to most eastern market locations, TransCanada was of the view that Mainline transportation costs do not need to be fully in the money to generate incremental throughput. TransCanada noted that there are numerous factors that are considered by parties when deciding whether to contract for firm service on the Mainline, and historically new long-haul contracts were signed for Mainline transportation even when the service wasn't necessarily in the money.

In response to an information request, TransCanada provided a comparison of the delivered cost of gas to Dawn, sourced from either the WCSB or Marcellus. The comparison for WCSB gas compared gas delivered to Dawn on a full-path route that used the Alberta System and Mainline, with a full-path route that used the Alliance and Vector pipelines. The delivered cost of Marcellus gas also compared a variety of paths to Dawn.

Table 12-2 Comparison of 2013 Delivered Cost of Gas from WCSB and Marcellus to Dawn ($/GJ)

	Restructuring Proposal	Status Quo
WCSB: Alberta System/Mainline to Dawn	4.71	5.89
WCSB: Alliance/Vector to Dawn	4.54	4.50
Marcellus to Dawn	4.09 to 4.29	4.21 to 4.41

TransCanada's expert, Dr. Carpenter, submitted that absent implementation of the Restructuring Proposal, the Mainline may face the prospect of not being able to recover its full cost of service at some point in the future. This is because, if it were to increase its tolls, throughput would fall further as the Mainline became uncompetitive relative to other existing and potential future transportation options.

APPrO

APPrO submitted that competitive and healthy natural gas transmission infrastructure is in the public interest of Canada. APPrO was of the view that its proposed ATM would better allow TransCanada to face competitive transportation alternatives.

APPrO indicated that a primary objective of this proceeding was to improve the competitiveness of natural gas produced in the WCSB in North American markets. APPrO compared the netbacks to WCSB producers from using the Mainline under the Status Quo, the Restructuring Proposal, and its ATM, with netbacks from using competing pipelines or accepting the Alberta Plant Gate price. This comparison was made with toll information available before the updated Throughput Study presented by TransCanada in June 2012. APPrO concluded that, unlike the Restructuring Proposal and Status Quo scenarios, the Mainline toll to Dawn would be in the money under APPrO's ATM. APPrO was of the view that even if tolls are in the money, they are still substantial in relation to the value they provide to natural gas producers and cannot guarantee the continued viability of the Mainline.

According to APPrO, the market basis differential between Empress and the Enbridge CDA is one important component in assessing the competitiveness of the Mainline as it provides market information regarding the likelihood of profitable long distance shipments. APPrO noted that if tolls between NIT and Dawn would be similar to the basis differential between these pricing points, this would allow for the economic viability of the Mainline. APPrO submitted that the Mainline's tolls do not necessarily need to be in the money in the short term in order for non-captive customers to be willing to commit to the Mainline. These customers may have other reasons to ship gas out of Alberta than simply the return they receive and this may include commitments that need to be kept regardless of whether it may be cheaper to sell gas in Alberta. APPrO stated that, in the long run, Mainline tolls will need to be low enough so that a customer will earn more in netbacks from using the Mainline than it can from not using it. If Mainline tolls are continually out of the money over the medium to long-term, they will result in new infrastructure projects and will not materially increase long-haul FT demand.

APPrO updated its ATM NIT to Dawn toll based on TransCanada's updated June 2012 Throughput Study. APPrO compared this updated toll of $0.7488/GJ with the effective price differential between Dawn and NIT between July 2011 and July 2012, which including the value of natural gas liquids, ranged from $0.673/GJ to $1.277/GJ with an average of $1.01/GJ. From this comparison, APPrO concluded that its proposed toll would have connected the WCSB to eastern markets over this period. APPrO indicated that, in contrast, the Mainline would not be close to competitive with the updated RP NIT to Dawn toll of $1.55/GJ.

CAPP

According to CAPP, the Restructuring Proposal would not restore the Mainline to its former role of connecting eastern markets and western Canadian supply under long-term contracts because the long-haul toll levels would still be too high. Further, CAPP indicated that the new lower cost sources of supply have led to decreasing spreads between NIT and other trading hubs in North America. CAPP submitted that it would be difficult to conceive a plausible long-term scenario

where WCSB producers would be able to take advantage of decreased Mainline tolls to materially increase their netbacks while spreads around the continent continue to shrink. CAPP submitted that a delivered cost analysis is important to assess the relative competitiveness of the WCSB supplies transported through the Mainline versus other supplies transported by other pipelines. Based on TransCanada's net forward analysis for 2012, CAPP indicated that under the Restructuring Proposal the delivered cost of gas from the WCSB to Dawn would still exceed the delivered cost from Marcellus. According to CAPP, the Mainline will likely be the pipeline used to meet demand that cannot be met by lower cost alternatives.

Under its multi-year fixed tolls proposal, CAPP recommended setting tolls at the levels that TransCanada considers to be competitive, with adjustments to the exact toll level in accordance with the Board's decisions on various parts of the Application. CAPP noted that at the RP toll levels, TransCanada believes it can recover volumes. CAPP indicated that the Board could not set a toll at a level that would result in an erosion of throughput and an even greater realization of the toll spiral.

According to CAPP, lower tolls do not necessarily always improve netbacks to producers, because to accomplish this objective, tolls need to be competitive and in the money. CAPP further submitted that lowering a toll that is not in the market to a level that is still not in the market would make no difference.

IGUA

IGUA submitted that the RP tolls would be uncompetitive and unsustainable on many routes, largely because they are based on costs associated with under-utilized facilities that are no longer required. IGUA indicated that the RP tolls would likely force TransCanada's customers in both the west and east to seek out new markets, new supply sources, and transportation routes that avoid the Mainline. Specifically, although the RP tolls are more competitive, the long-haul tolls are still well above the market value of that transportation, such that shippers would continue to position themselves to use less long-haul. IGUA echoed TransCanada's submission that new North American gas supply and transportation infrastructure has resulted in a reduction in the basis differentials between major trading points. IGUA suggested that this implies the market value of pipeline capacity between such locations has fallen.

IGUA also submitted that the competitiveness of energy-intensive industrial consumers that rely on the Mainline is significantly impacted by TransCanada's uncompetitive tolls. These tolls burden them with a cost that its competitors in other parts of North America do not face.

ANE

ANE submitted that it was critical for TransCanada to successfully generate discretionary revenues, to assist in keeping FT tolls competitive and encourage longer term contracting. ANE also suggested that Marcellus gas entering the Mainline in Ontario actually strengthens the Eastern Triangle, and cautioned that shifting too many costs from long-haul to short-haul tolls could impact the health of the Eastern Triangle. ANE highlighted that with appropriate price

signals, Marcellus gas has the opportunity to enter the TransCanada system and reach the constrained markets in New England.

ANE submitted that reliability and diversity of supply are among the most important factors for LDCs when determining their supply portfolio. ANE also noted that if tolls on the Mainline could be reduced, then the Mainline would continue to play a significant role for ANE well into the future.

Apache, Enerplus and Husky

Apache, Enerplus and Husky argued that Mainline tolls will not be in the money and the Mainline will remain a swing pipeline, regardless of whether the Restructuring Proposal is approved or not. According to Apache, Enerplus and Husky, it is up to TransCanada to attract new volumes to the Mainline and allocating additional risk to TransCanada, along with providing it the tools to manage that risk, would provide TransCanada incentive to do so.

Cenovus/Encana

Cenovus/Encana submitted that the evidence demonstrated that even if the Restructuring Proposal were implemented, the Mainline from the WCSB to eastern markets would be out of the money because the toll would be higher than the basis differential and WCSB gas delivered to eastern markets via the Mainline would remain the highest delivered cost gas. Cenovus/Encana pointed to the information request response from TransCanada, summarized in Table 12-2, which showed for example, that the 2013 delivered cost of WCSB gas to Dawn would be $4.71/GJ if shipped on the Mainline with RP tolls versus $4.54/GJ if delivered via Alliance/Vector. The 2013 delivered cost of Marcellus gas to Dawn would be even lower, ranging (in the RP case) from $4.09/GJ to $4.29/GJ depending on the path. Cenovus/Encana argued that, as a result, it is highly unlikely that shippers will sign up for long-haul Mainline firm service, even if the RP were implemented.

Cenovus/Encana also argued that the Mainline's business has changed, such that future use of Mainline long-haul will be based on discretionary services. Accordingly, TransCanada should focus on increasing its revenues from discretionary flows from the WCSB to enhance Mainline competitiveness.

Centra

Centra argued that the RP tolls will remain uncompetitive and lowering tolls to a level that is still uncompetitive will not attract any more volumes. In addition, the uncertainty related to Mainline throughput and tolls post-2013 may incent some shippers to accelerate their efforts to leave the Mainline.

MAS

MAS submitted that recent increases in Mainline tolls have undercut the Mainline's competitiveness, accelerating the decline in throughput. According to MAS, TransCanada's Status Quo methodology would lead to tolls rising to unbearable heights for shippers. The underlying problem is that the Mainline's cost structure is not competitive in today's North American natural gas market. MAS emphasized the importance of the Mainline's long-term competitiveness, suggesting that near-term costs needed to be reduced without increasing future costs. MAS submitted that its proposal would provide for gradual and assured elimination of the excess capacity costs, which it expected would restore competitiveness in Mainline tolls.

MAS indicated that since the shift towards short-haul transportation is expected to continue on the Mainline, it is important to maintain competitive short- haul tolls to attract billing determinants on those paths. The Mainline currently provides an efficient method of moving Marcellus gas into and out of storage, and delivering Marcellus gas to Ontario and Québec customers. According to MAS, there is significant opportunity to re-export lower cost Marcellus and Utica gas via Ontario to markets in New England and the U.S. northeast. However, this market is very competitive, and the services provided on the eastern part of the Mainline are price-sensitive. MAS suggested that if price signals indicate such paths will be cost prohibitive, projects will likely be constructed that bypass the Mainline. MAS also submitted that Mainline tolls should not be established with the objective of favoring supply from the WCSB. New technology related to gas supply offers the promise of competitively priced gas to consumers, and the Board should not deny shippers in the Eastern Triangle the benefits of the competitive market for gas.

MAS was of the view that the RP would not reduce tolls enough to significantly increase long-haul throughput. MAS supported this with a modeling analysis using ICF International's Gas Market Model, run with various long-haul Mainline toll levels. This analysis suggested that ex-Alberta Mainline volumes would continue to decline if long-haul toll levels were $1.50/MMBtu or higher. MAS also presented a similar analysis, but for different short-haul Mainline toll levels, to support its submission that shifting costs to short-haul tolls could have significant impacts on Mainline short-haul throughput and eastern consumers, while causing little increase in long-haul throughput. MAS also presented an analysis suggesting that even with the RP tolls, WCSB gas delivered long-haul on the Mainline would be the highest delivered cost of gas to eastern Canada and would provide the lowest netbacks to WCSB producers.

Enbridge Gas Distribution Inc. (EGDI)

In response to an information request, EGDI provided a comparison of the price of natural gas, home heating oil, and electricity for a typical Enbridge Rate 1 customer utilizing 3,064 m^3 of natural gas. The price was shown to be approximately $7.72/GJ for natural gas, versus approximately $30.00/GJ for home heating oil and $26.00/GJ for electricity.

EGDI noted that WCSB gas would be an important element of its supply mix for the next few years. It submitted that there would be a point in the future when WCSB gas will seek markets that are more lucrative and will no longer preferentially flow eastward. At that point, EGDI could be entirely served from new supplies in eastern basins.

Gaz Métro

Gaz Métro argued that the current and forecast utilization of the Mainline is now comparable to the Distress Case throughput scenario submitted by TransCanada in RH-3-2004. Gaz Métro emphasized that in that proceeding, TransCanada submitted that the Distress Case would result in an unsustainable tolls situation, where tolls would be so high that they would result in a high risk of shippers abandoning the Mainline. Gaz Métro argued that the Distress Case volume levels are comparable to the current throughput forecast and that approving the Restructuring Proposal would not be sufficient to avoid a toll spiral.

Talisman

Talisman argued that even with the RP tolls, there is a very small possibility that WCSB production would be able to compete in eastern markets. This is the new gas market reality, reflecting the large gas production that has been found much closer to those markets. Talisman emphasized that the expected spreads between NIT and Dawn were much lower than RP tolls and that WCSB producers would receive better netbacks by using outlets other than the Mainline. Talisman also argued that although the RP tolls would make the Mainline more competitive, the Mainline would still be unable to compete with the alternatives available to both producers and consumers. In discussing the accuracy of TransCanada's modeling, Talisman questioned whether TransCanada accurately captured how shippers' decisions are influenced by non-economic factors, such as desire for supply source diversification, transportation path diversity, contract term objectives, or service flexibility.

Tenaska

According to Tenaska, the general industry is concerned about the competitiveness of the Mainline and its long-term viability in the evolving North American gas market. Tenaska submitted that it is in the interests of the Mainline's customers that the pipeline be as competitive as possible in attracting throughput and revenue to the system. Tenaska was of the view that the Mainline has to compete more effectively to attract more business in order to average down the unit costs that are borne by captive customers.

Tenaska indicated that competitiveness of a pipeline is largely a function of the overall level of the tolls it charges. The Mainline could be made more competitive by reducing costs, offering stable and predictable tolls, and offering short-term services that are more flexible and commercially useful.

Tenaska was of the view that toll competitiveness based on observed basis differentials would not be a sound foundation for designing tolls. According to Tenaska, price formation mechanisms at natural gas market centers are complex, often opaque, apt to change from day to day and driven by marginal costs. Also, for captive customers, which are most of the Mainline's current FT shippers, the notion of a competitive toll has limited significance, because by definition, these shippers have no alternatives.

Tenaska suggested that over the past two years, the market differential has been less than the Mainline toll on every day for all paths except the short-haul Dawn/Waddington path. According to Tenaska, the reasons for this situation are higher Mainline tolls and the general collapse of the east-west basis differentials because of new pipelines in the U.S. and the increasing development of shale gas resources in the U.S. northeast. Tenaska did not expect this situation to change in the foreseeable future.

According to Tenaska, a reduction of $0.05/GJ, $0.10/GJ or $0.20/GJ in Mainline long-haul tolls could not be completely ignored but would have no impact on the Mainline's overall competitiveness. Tenaska was of the view that the value of FT capacity must be evaluated on an annual basis, and that shippers will contract for service only if they believe that market price differentials justify contracting over an entire year, taking account of all relevant term, toll and commodity risks.

Union

Union indicated that it wants competitive short-haul and long-haul tolls, and argued that the MAS proposal, particularly related to disallowing equity returns on the NOL and accelerating depreciation of the NOL, would restore competitiveness over time. Union argued that the Eastern Triangle would continue to expand and be highly utilized, but only if Eastern Triangle tolls remain competitive.

Union indicated that diversity of supply was its number one objective when considering its supply portfolio. It further noted that it is likely that a portion of its supply will always come from the WCSB.

ADOE

ADOE argued that while it would like to see continuing WCSB access to traditional markets, the Board should allow the market to operate and evolve naturally. Accordingly, if eastern markets choose to access gas from basins in the U.S. northeast, the Board should not approve tolls that, as their purpose, interfere with that. ADOE suggested that it will be difficult for Mainline long-haul to compete at any toll level, other than for winter peaking supply and for captive customers.

B.C. Ministry

The B.C. Ministry supported a long-term solution that would ensure competitive access for western Canadian natural gas to its traditional markets.

Ontario

Ontario argued that the Board has a responsibility to take action to ensure the Mainline remains viable and capable of providing service to its customers at a reasonable cost. According to Ontario, for the Mainline to remain competitive, the cost of delivering natural gas on the Mainline must reflect reasonable costs in line with market alternatives. Ontario argued that tolls

at the RP level would remain out of the money and WCSB gas delivered on the Mainline would be the most expensive supply option at Dawn at $4.97/GJ.

TransCanada Reply

In TransCanada's view, competitive tolls are not the sole objective for setting tolls, to be pursued at the expense of all other considerations. Lower tolls are desirable, as competition does exist, but tolls should continue to be set in a manner that provides a reasonable opportunity to recover prudently incurred costs.

TransCanada argued that competitiveness is not an on/off switch where the Mainline is either competitive or not. TransCanada submitted that most pipelines in North America are out of the money on an annual average basis. Therefore, they would be uncompetitive on the definition that certain intervenors proposed. Competitiveness, according to TransCanada, is a relative concept. Overall, TransCanada submitted that notwithstanding the Mainline being the most expensive way to deliver gas to eastern markets on an annual average basis, parties continue to contract for transportation regardless of price by reason of reliability of supply or due to local requirements for firm capacity to serve customers. Moreover, on peak days, the Mainline is competitive and by lowering tolls through the Restructuring Proposal, the Mainline would be competitive on more days.

Views of the Board

In recent years, competitive pressures have had substantial impacts on the Mainline. These impacts are summarized in Chapter 2 and include large decreases in long-haul contracting and Mainline western receipts, and large toll increases. As a result, competitive pressures have shifted and continue to shift the cost of underutilized facilities to remaining shippers through higher tolls.

We agree with TransCanada that immediate action needs to be taken. We also agree that the impact on tolls as a result of reduced volumes, increasing supply options, and changes in contracting practices would intensify if the Status Quo prevailed. However, while TransCanada submitted the Restructuring Proposal as the appropriate action to be taken, we have denied some of its most significant toll-reducing components. Consequently, the tolls that would result from implementing aspects of the Restructuring Proposal that have been approved in this Decision are substantially higher than the Restructuring Proposal tolls as filed.[72]

Why competitive tolls are important

In Chapter 4, we determined that to assess the point at which the Mainline's underutilization due to competition becomes a realization of fundamental risk, the competitiveness of certain Mainline tolls is a factor that we may consider. This evaluation is needed for the Mainline's supply and market areas that have existing or reasonable potential for competing alternatives for at least two reasons.

[72] Refer to footnote 76.

First, uncompetitive tolls could lead to further de-contracting and erosion of throughputs, or they could prevent the recovery of throughput. Uncompetitive tolls can have this effect in a number of ways, including by increasing the probability that infrastructure would be constructed that would bypass the Mainline. It is our view that it is generally economically inefficient to construct new facilities to serve requirements that can be provided by existing infrastructure.

Second, the specific characteristics of the Mainline mean that uncompetitive long-haul tolls could impose significant costs of underutilized assets on the relatively small Mainline markets that are most captive, such as those in northern Ontario, or on markets that now use relatively few kilometers of the system. The Mainline was, by and large, constructed to transport gas from the WCSB to markets in eastern Canada and the northeastern U.S. Today, the Mainline integrated system can transport up to approximately 7.0 Bcf/d (198.3 $10^6 m^3/d$) of WCSB gas to market. The Prairies and NOL segments are critical to this capability, and together they form approximately two-thirds of the Mainline's undepreciated asset value.[73]

In light of the foregoing, long-haul Mainline FT tolls must be competitive to be just and reasonable. If competitive long-haul FT tolls would not allow TransCanada to recover Mainline costs, this would mean that the Mainline's fundamental risk has been realized.

Meaning of "competitive" long-haul service

We accept that the Mainline can be considered to be competitive in transporting gas from the WCSB to eastern markets even if it only provides such service in a more limited role, and notably in a role that provides less base load service, as compared to what it has provided historically. A more limited role is consistent with what is expected in TransCanada's Case 1 throughput forecast, and can be consistent with the future envisioned by TransCanada and a number of intervenors, where a significant part of long-haul Mainline service would be for peaking and seasonal needs. We agree with TransCanada that there are varying degrees of competitiveness; that is, competitiveness is a spectrum.

For the Mainline to be competitive, long-haul Mainline FT tolls do not need to be in the money based on annual averages of basis differentials, netbacks, or delivered cost of gas on competing pipeline alternatives.[74] However, such tolls must be close enough to being in the money to provide sufficient value to shippers. Value, in our view, is a function of the Mainline's service attributes, including considerations of reliability and diversity of supply. If long-haul FT tolls are too far out of the money on an annual average basis, then the Mainline will not be competitive in the provision of long-haul service, even in the more limited role envisioned by parties to this proceeding. In our view, considering the

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[73] At the end of 2011 the Prairies and NOL comprised 30 per cent and 37 per cent of Mainline net book value, respectively.

[74] A particular toll can be considered as being in the money if it is expected to be equal to or lower than the average annual basis differential between the price of gas at the corresponding receipt and delivery point or area. Alternatively, it could be considered in the money if it would yield annual netbacks or delivered cost of gas that are the same or better than other competing options.

Mainline's long-haul competitiveness in this way is consistent with the contextual approach used to consider fundamental risk, set out in Chapter 4.[75]

Upper limit for competitive Mainline tolls

Consistent with our finding in Chapter 3 regarding TransCanada's Case 1 throughput forecast, we find that long-haul FT tolls established at the RP levels would be expected to allow the Mainline to be competitive. However, we note that even at the RP levels, tolls are forecast to be considerably out of the money, on an annual average basis. In our view, this suggests that long-haul FT tolls at the RP levels are near the upper limit of what would be expected to allow the Mainline to be competitive.

It is our view that some of the features of this Decision will elevate the upper limit of what would be considered a competitive long-haul FT toll. For example, we are of the view that the competitiveness of the long-haul FT toll will be enhanced by the toll stability and predictability that results from our decision to fix Mainline tolls for a multi-year period, as set out in more detail in section 12.2 of this Decision. A number of parties indicated that, in addition to toll levels, toll stability and predictability are key characteristics that can support decisions to contract for firm service on the Mainline.

Overall, we find that multi-year fixed long-haul FT tolls can be competitive even if slightly above the RP levels.

Tolls derived from the Status Quo, and approved parts of the Restructuring Proposal

It is our opinion that FT tolls at the Status Quo levels, and FT tolls that would result from implementing aspects of the Restructuring Proposal that we have approved, are not just and reasonable. Tolls calculated pursuant to these approaches would be expected to prevent adequate recovery of throughput. For the Status Quo, this was reflected in TransCanada's Case 3 throughput forecast, which indicated that the Status Quo is expected to lead to the development of infrastructure projects that would bypass the Mainline. The FT tolls resulting from implementing aspects of the Restructuring Proposal that we have approved are forecast to leave the Mainline too far out of the money on an annual average basis on long-haul paths.[76] Therefore, like the Status Quo tolls, they would further contribute to the root cause of the decline in volumes on the Mainline.

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[75] For further clarity, we note that an alternative approach would be to consider the Mainline to be competitive in providing long-haul service only if its tolls put it on par with the cost of other ex-WCSB pipelines. Long-haul tolls would have to decline substantially to achieve this. As we stated in Chapter 4, "determining the point at which underutilization is the materialization of the Mainline's fundamental risk requires the Board to use informed judgment." In our judgment, this alternative approach would impose throughput risk on the Mainline to which it has not traditionally been exposed. Accordingly, this alternative approach would be inconsistent with the Mainline's fundamental risk.

[76] While the precise toll levels resulting from the parts of the RP that we are approving were not filed, we find that the NIT to Dawn toll would be, at a minimum, above $1.86. We make this determination on the basis that TransCanada estimated that the increase in the RP NIT to Dawn Toll ($1.47) from removing the ASE and Depreciation Proposal from the RP would be $0.25/GJ and $0.14/GJ, respectively, measured on an isolated basis. These estimates do not account for reduced throughput that would result from the increased tolls, and adding their individual impacts (which results in $1.86/GJ) does not account for any of the additional impact captured in the aggregation effect; we note that the aggregation effect was large. In addition, denying the TQM proposal would further increase the NIT to Dawn toll, as would removing TransCanada's voluntary contribution.

Just and reasonable FT tolls

It is our view that competitive tolls that allow TransCanada a reasonable opportunity to recover its Mainline costs can be implemented, by fixing tolls for a multi-year period and using cost deferrals, as further described in Section 12.2. The lower these fixed tolls are set, the more competitive the Mainline would be. However, lowering fixed tolls requires some combination of accepting larger cost deferrals for recovery in future tolls and making it more challenging for TransCanada to recover its costs. As a result, we are of the view that these multi-year fixed FT tolls should be set at a reasonable upper limit of what would be expected to allow the Mainline to be competitive.

The competitiveness of the Mainline for long-haul transportation can best be reflected by the Mainline long-haul toll from Empress, Alberta to Dawn, Ontario. That path connects two liquid trading hubs: NIT and Dawn. The Mainline receipt point that connects to NIT is located at Empress, on the Alberta/Saskatchewan border. NIT is a significant trading hub. It provides price transparency, supply reliability and trading liquidity to the WCSB and export markets.

Dawn is a large liquid hub located in southern Ontario. Natural gas is delivered to Dawn from a number of major North American supply basins, including the WCSB, by several pipeline systems. The large number of natural gas storage facilities at Dawn enables trading activities and transparent price discovery.

The Mainline competes with other pipelines in providing transportation value from NIT to Dawn, impacting netbacks to producers. The Mainline also competes with other basins in the delivered cost of gas to Dawn.

Having considered the evidence, including evidence about the competitiveness of the RP toll level, the forecast basis differential between NIT and Dawn, and the stability offered by the multi-year fixed tolls, we find that the reasonable upper limit of a competitive, just and reasonable, multi-year fixed Mainline FT toll for the long-haul path from Alberta to Dawn (in particular, from Empress to Union SWDA), is $1.42/GJ. We note that this toll does not include the Alberta System's FT-D1 rate for Empress delivery or the Mainline's delivery pressure toll that is charged for Dawn deliveries. Including those amounts implies a NIT to Dawn toll of approximately $1.60/GJ.

Multi-year fixed FT tolls have to be established for the other Mainline paths. We are of the view that this can be accomplished by basing these tolls off of the Empress, Alberta to Dawn, Ontario toll, as follows.

Multi-year fixed FT tolls for other Mainline paths should be set by adjusting the Empress to Union SWDA FT toll of $1.42/GJ to reflect differences in distance of haul. To make this adjustment, these tolls shall be calculated using the adjusted unit costs (that is, for both energy ($/GJ) and energy-distance ($/GJ-km) that would generate the Empress to Union SWDA FT toll of $1.42/GJ. These adjusted unit costs shall be calculated by adjusting downward from 2013 "surrogate" energy and energy-distance unit costs. The

"surrogate" unit costs are the amounts that would be used to calculate FT tolls for only the 2013 Test Year, rather than for a multi-year period, based on all aspects of this Decision except with no TSA (discussed in Section 12.2). The downward unit cost adjustments shall be by the same proportion as would generate the Empress to Union SWDA FT toll of $1.42/GJ, if starting from the 2013 Empress to Union SWDA FT toll (not including the delivery pressure toll) that would result from the 2013 "surrogate" unit costs.

For calculating these and all other tolls, distances of haul shall be calculated using 2010 Base Year data, which is how TransCanada proposed to calculate 2013 distances of haul. By calculating tolls on all paths using the adjusted unit costs, Mainline tolls will reflect the cost allocation methodology approved in Section 7.2. We accept that this approach will reflect the cost allocation that results from 2013 costs, even though the tolls will be in place for a multi-year period. [77]

We find that multi-year fixed FT tolls for remaining Mainline paths will be just and reasonable if they are calculated using the adjusted unit costs described above. In our view, these tolls will allow the Mainline to be competitive, recover throughput and assign the appropriate amount of Mainline costs across the system. These tolls strike the appropriate balance by providing TransCanada with a reasonable opportunity to recover Mainline costs while not imposing too many of the costs of underutilization due to competition on remaining shippers during the time period in which tolls are fixed.

In concluding that these tolls will not impose too many costs of underutilization on remaining shippers, we considered the competitive position of the Eastern Triangle. We find that these tolls will allow TransCanada to compete to maintain and augment the health of this segment of the system.

Tolls for Storage Transportation Service

In Section 7.9, we found that flows under STS and STS-L service have the same system impacts as flows under other short-haul firm services. Accordingly, we find that it is appropriate to establish multi-year fixed STS and STS-L tolls using the adjusted unit costs, as these will also be used to establish the multi-year fixed FT tolls.

Tolls for other services which generate Non-Discretionary Miscellaneous Revenue or Other Miscellaneous Revenue

We find that it is appropriate to establish a multi-year fixed delivery pressure toll and Union Dawn Receipt Point Surcharge. These shall be calculated based on a percentage reduction from their respective levels that would result if they were calculated for 2013 only, with no TSA additions. The reduction will be the same percentage reduction as would reduce the 2013 "surrogate" unit costs to the adjusted unit costs. This approach

[77] As further explained below, we also find that the Adjusted Unit Costs should be used to establish the multi-year fixed tolls for all FT, STS and STS-L service on the Mainline.

will ensure that these charges are predictable and stable, and that they reflect the expected throughput recovery.

Similarly, we find that the 10 per cent FT-SN premium approved in Section 8.4 should apply for the term of the multi-year fixed FT tolls.

With respect to the Sales Meter Station Charges, we note that this charge applies only to meter stations where less than 3,750 GJ of gas is delivered during a contract year. As a result, different stations may fit this criterion during each year of the term of the multi-year fixed tolls. Accordingly, by exception, we find that it is appropriate to establish these charges each year, rather than fixing them for the multi-year term. These charges may be filed with the Board under paragraph 60(1)(a) of the NEB Act. However, we note that there was little evidence related to these charges and that they generate very little revenue (TransCanada forecast $69,000 for 2013, which was also the annual amount between 2006 and 2010). Accordingly, TransCanada may propose an acceptable alternative approach in its Compliance Filing, which might be more administratively efficient.

With respect to Short-Notice Balancing, Energy Deficient Gas Allowance, and Enhanced Capacity Release services, these tolls shall be fixed for the multi-year term in the same manner used for the delivery pressure toll and Union Dawn Receipt Point Surcharge. However, we note there was extremely limited evidence regarding these services in this proceeding. Accordingly, in addition to including tolls calculated in this manner in its Compliance Filing, TransCanada may also propose that tolls for some or all three of these services be updated annually. If TransCanada does so, it shall also include its rationale for why tolls for these services should be an exception from the multi-year fixed tolls approach.

12.2 CAPP's Multi-Year Fixed Tolls Proposal

CAPP proposed a multi-year approach to setting tolls, instead of the Mainline's traditional year-by-year approach. Based on TransCanada's Case 1 throughput forecast showing a throughput rebound in coming years, tolls would be fixed for a multi-year period starting in 2013 with the expectation that they would under-recover the annual revenue requirement in the initial years and then over-recover the annual revenue requirement in subsequent years. During the term of the multi-year fixed tolls, annual revenue surpluses or deficits would be placed in a TSA. This account would track the cumulative (that is, multi-year) shortfalls or surpluses resulting from the fixed tolls.

CAPP submitted that its proposal would enable the Mainline to address its challenges, align the interests of TransCanada and its shippers, and be consistent with regulatory principles. CAPP indicated that the multi-year tolls could be set at levels similar to the 2013 Restructuring Proposal tolls, while providing TransCanada a reasonable opportunity to fully recover the Mainline revenue requirement over a reasonable period of time. CAPP indicated that looking at costs and revenues over a multi-year period is aimed at achieving toll levelization and cost recovery over a multi-year period rather than annually. With TransCanada expecting increased

natural gas demand and western Canadian production, the multi-year approach allows tolls to be lower now and higher later, as compared to the traditional annual approach.

CAPP submitted that this approach is consistent with cost of service toll setting, and has a variety of benefits. One very desirable feature, from the perspective of shippers, is that the multi-year approach would provide toll stability. CAPP indicated that even if 2013 tolls are economically attractive, shippers will be reluctant to sign contracts in the face of uncertainty about future toll levels. As another benefit, requiring TransCanada to live with pre-determined tolls for several years would make TransCanada more accountable. This would ensure better alignment of the interests of shippers and the Mainline, improving the incentive for the Mainline to effectively manage its revenues and costs while being customer responsive. As part of this, the Mainline would be more accountable for how it exercised its proposed discretionary pricing flexibility, with a strong motivation to manage its flexibility prudently and in a way that is customer responsive. As evidence of TransCanada's ability to reduce costs, CAPP pointed to TransCanada's success at reducing Mainline costs that were incentivized in the 2007-2011 Settlement. In addition, the Mainline would have a strong incentive to ensure that any new projects, such as expansions to bring in U.S. gas into Ontario, generate positive net revenues for the system. CAPP suggested that the incentives would materially decrease the long-term risk arising from unforeseeable market changes. Another benefit of the proposal is that it allows the Mainline's toll challenges to be addressed without needing to entangle the Alberta System, as the ASE would do. CAPP also submitted that its proposal is flexible, so that it could easily be modified to deal with future market changes.

CAPP suggested that the carrying charges on the TSA should be based on the expected short-term debt rate for the period covered by their proposal, estimated at 2.5 per cent. According to CAPP, such a rate would be appropriate because the TSA would be a special deferral account addressing a special non-recurring situation for the Mainline, and consistent with the RH-3-86 Decision, this type of deferral account should have carrying charges at a rate that approximates the utility's probable costs of financing the deferral account. Because the TSA balances are not expected to be excessive or deferred for a long period of time, the TSA can be financed by relatively short-term debt.

CAPP was of the view that if the TSA were to earn the return on rate base, it would create excessive returns for shareholders because CAPP's recommended ROE already includes a premium for the added risk related to the deferral of revenues. Further, if the TSA carrying charges equal the return on rate base, TransCanada would have less incentive to minimize the TSA balance. CAPP also indicated that the carrying charges on the TSA, whether at 2.5 per cent or higher, would not represent a significant dollar amount.

Although TransCanada would have a reasonable opportunity to recover its costs, CAPP acknowledged that the multi-year proposal does not guarantee that TransCanada will recover the revenue shortfalls. If the forecast throughput growth does not materialize, revenues may not grow sufficiently to produce full cost recovery. If faced with a large outstanding TSA balance, a rate case would need to assess how to deal with the balance. Recognizing this possibility, CAPP submitted that if the TSA balance grows to a point where the Mainline's equity ratio falls to 36 per cent (or approximately $650 million), this should trigger a new rate case. In addition, if

unforeseen market conditions materialize such that TransCanada does not expect the TSA to be recoverable within the rate stabilization period, CAPP would expect TransCanada to bring forward a new rate case as soon as such information emerged, and not wait to hit the 36 per cent trigger. CAPP further explained that while it considered the 36 per cent trigger to be an off-ramp, CAPP expected that TransCanada would initiate a rate case well in advance of reaching the trigger if market conditions suggested a rapid growth of the TSA. CAPP indicated that if the volumes on the Mainline do not recover as TransCanada expects, then all costs would be preserved for consideration in what would then be a discussion of stranded investment, which CAPP defined to mean investment that cannot be recovered in tolls over the Mainline's economic life. All regulatory options would remain on the table at that time.

CAPP also emphasized that TransCanada, through its ability to influence system costs and revenues, would be able to manage the size and duration of TSA balances. CAPP stated that TransCanada is familiar with managing risks, doing so daily in its other businesses.

As described further below, CAPP put forward tolls that it expected to remain in place for five years, since they would be forecast to eliminate any cumulative shortfall in the TSA at that time. However, CAPP indicated that depending on how things unfold, the multi-year tolls could be in place for less or more than five years. In addition to the possibility that rates would be revisited due to the 36 per cent trigger or TransCanada otherwise anticipating the TSA to be unrecoverable, the multi-year tolls could remain in place beyond five years if at that time the TSA balance were still negative and circumstances, such as how long it would likely take to eliminate the TSA, warranted continuing the fixed tolls. In addition, because tolls and the toll regime would be revisited once the negative TSA balance was eliminated, the multi-year tolls could be in place for less than five years if things unfold better than expected.

As part of its proposal, CAPP also recommended a benefits-sharing incentive mechanism for TransCanada. This is discussed separately in Section 12.3.

CAPP recommended that to ensure transparency and accountability, TransCanada include updates on the status of the TSA in the Mainline quarterly surveillance reports that are already filed with the Board.

CAPP contended that its multi-year tolls proposal is: responsive to the Mainline's current economic situation, prospective, comprehensive, based on a full revenue requirement with no cost disallowances, and protects TransCanada's downside from low throughput by putting shortfalls in the TSA.

CAPP's Analysis

CAPP presented an empirical analysis of its proposal based on TransCanada's Case 1 throughput forecast, specific multi-year fixed tolls, and a multi-year forecast of the Mainline revenue requirement.

With respect to the multi-year fixed tolls, CAPP fixed them at a level that meant that the cost of going from NIT to a point 3,000 km from Empress would be $1.69/GJ, approximately the same

level as TransCanada proposed under its RP. CAPP submitted that this corresponded to a toll of $1.53/GJ to go from Empress to that point 3,000 km away. CAPP's analysis did not include TransCanada's ASE proposal, which CAPP opposed. For the other toll design proposals in the RP where CAPP took no position, CAPP's analysis reflected TransCanada's proposals.

CAPP's multi-year forecast of the Mainline revenue requirement was based on data that TransCanada provided in response to CAPP Information Request 2-47, combined with a number of CAPP recommendations and assumptions. Specifically, CAPP's own recommendations were used as follows:

- depreciation expenses and LTAA amortization amounts were calculated based on the Status Quo depreciation approach,
- in addition to TransCanada's proposed $100 million addition to the LTAA in 2012, $100 million was added to the LTAA every year from 2013 through 2016,
- return and income taxes were calculated based on a 9.5 per cent ROE combined with a 40 per cent equity ratio,
- the TSA would accrue interest at a rate of 2.5 per cent,
- CAPP assumed Capital Cost Allowances would decline from 2014 forward (beginning from approximately TransCanada's starting point), which in turn means CAPP assumed that the income tax expense would be higher than if CAPP had used TransCanada's forecast for the Capital Cost Allowances to be flat from 2015 onward,
- CAPP did not include TransCanada's voluntary $25 million annual contribution in any year, and
- CAPP assumed that 2012 interim tolls would recover the 2012 revenue requirement, which CAPP indicated was consistent with TransCanada's stated expectation during the oral portion of the hearing.

The remaining revenue requirement components were based on TransCanada's response to CAPP Information Request 2-47, and are described in *Views of TransCanada*, below. CAPP indicated that it used TransCanada's DMR forecast, even though CAPP believed it may have under-estimated those revenues. CAPP also suggested that TransCanada's forecast of TBO costs may be conservative on the high side, given the fact that TransCanada has already significantly reduced GLGT TBO costs. CAPP also later indicated that these TBO costs did not account for TransCanada's updated submission related to changes to TransCanada's GLGT contracts effective 1 November 2011, which resulted in TransCanada lowering its total forecast TBO costs for 2012 and 2013 by $0.8 million and $14.3 million, respectively.

Based on CAPP's analysis, revenues were expected to be lower than the revenue requirement in 2013, 2014, and 2015, after which revenues would exceed the revenue requirement. Specifically, the cumulative negative TSA balance was forecast to be $144 million after 2013, $230 million after 2014, and then peak at $254 million after 2015. It would then fall to a negative balance of $95 million after 2016, before having a positive balance of $50 million after 2017, meaning that at that point the Mainline would have recovered all of its costs from the multi-year period, and tolls would be revisited.

CAPP suggested that under the multi-year fixed tolls proposal, future rate base amounts would be similar to those forecast by TransCanada, and noted the similarity between the size of the CAPP-recommended LTAA additions and the Restructuring Proposal's lower depreciation expense. CAPP forecast that under its proposal, the rate base for each year between 2014 and 2020, inclusive of the LTAA but not the TSA, would be smaller than what it would be under the Restructuring Proposal. CAPP forecast that the difference between the rate bases in the two scenarios would grow from approximately $100 million in 2014 to approximately $700 million in 2020.

CAPP indicated that if the Board's decisions differed from what CAPP assumed in its analysis, the Board could still adopt the multi-year proposal by accounting for such differences through a combination of adjusting the LTAA additions, adjusting the tolls (including the possibility of tolls that escalate annually, for example, by one per cent), or expecting different TSA balances (which could also change the forecast of how long it would take for the TSA balance to be eliminated). CAPP did not recommend a general way that the Board should choose between these three adjustments, but cautioned that if tolls were adjusted significantly away from those in the RP, then it may not be appropriate to rely on the Case 1 forecast, since throughput varies with toll levels. CAPP also indicated that if the Board approved TransCanada's depreciation proposal, the additional CAPP-recommended LTAA contributions would not be necessary.

Views of Intervenors

IGUA

IGUA opposed CAPP's proposal, arguing that it was fundamentally flawed because it was based on two assumptions that were not supported by the evidence. The first was that Mainline costs would decline over time, and the second was that Mainline throughput would increase. IGUA believed that neither of these forecasts would materialize, which could then cause irreparable damage to the Mainline, and leave future generations of Mainline users to pay for the cost deferrals tied to the CAPP proposal. IGUA also expressed concern with how high the multi-year fixed tolls would be.

SEPAC

SEPAC supported CAPP's multi-year fixed tolls proposal, indicating that it represented a viable alternative business model for the Mainline, and that it would better align the interests of TransCanada and its stakeholders.

Apache, Enerplus, Husky and Talisman

Apache, Enerplus, Husky and Talisman confirmed in argument that they all fully supported CAPP's proposal.

BP

BP indicated that it could support the CAPP-proposed tolls, subject to BP's suggested changes with respect to certain more minor matters, discussed in other sections of this Decision.

Gaz Métro

Gaz Métro expressed concern with the cost deferrals in CAPP's proposal. Gaz Métro argued that, like TransCanada's proposed reduction of depreciation expenses, the CAPP cost deferrals create the risk of dramatically higher tolls for future generations of shippers.

Union

Union argued that, like TransCanada's Restructuring Proposal, CAPP's proposal fails to address the fundamental problem of excess capacity. Instead, CAPP's proposal defers costs into the future, which is not the answer for captive shippers like MAS, who may be left to pay those costs in the future.

Québec

Québec indicated that it was opposed to intervenor proposals that deferred costs into the future, arguing that this only defers the problem, while the situation could get even worse.

Other Views

In addition to the views of parties expressly related to the CAPP proposal, some views regarding other matters in this proceeding are also relevant to the CAPP proposal. Most particularly, some of the submissions related to depreciation, the STAA and the LTAA, and could apply or relate to all potential cost deferrals.

Views of TransCanada

TransCanada indicated that while the CAPP proposal would provide shippers with short-term toll stability, in the longer-term tolls could increase dramatically and the Mainline may not be viable. TransCanada's Case 1 throughput forecast, although its best estimate, is still just one forecast within a range of possible outcomes, and Mainline flows are not within TransCanada's control. Throughput and supply forecasts tend to be less accurate the further into the future they move, and the current environment is particularly uncertain. As a result, CAPP's forecast imposes more certain near-term revenue deferrals on TransCanada in exchange for less certain future revenue surpluses that are contingent on throughput recovery. As discussed in Section 9.2, TransCanada submitted that the CAPP proposal would impose downside risk of the revenue shortfall becoming unrecoverable, without any corresponding upside potential beyond the ability to recover the TSA sooner. TransCanada stressed that it is especially important to consider downside throughput risk given the recent low gas price environment.

TransCanada expressed significant concern about what would occur under the CAPP proposal in the event that throughput did not recover as forecast. Noting CAPP's comments indicating that a stranded investment discussion would result if throughput does not recover as forecast, TransCanada indicated that the CAPP proposal clearly exposes TransCanada to significant risk of not recovering prudently incurred costs. In addition, CAPP suggested that shippers should be significantly concerned about the possibility that a large TSA could contribute to much higher future tolls. If recovery of the TSA becomes unlikely, the Mainline could find itself right back in its current position except with large additional deferrals. TransCanada suggested that the CAPP proposal is not as robust as the RP, over a range of forecasts. TransCanada acknowledged that in the event of lower throughput, there would be upward pressure on tolls under the RP, but the pressure would be greater under the CAPP proposal.

TransCanada also argued that if throughput is lower than expected under the CAPP proposal, and as a result TransCanada ultimately suffers a financial impact, this could have the effect of imposing on TransCanada the impacts of the loss of contracts from 1999 to 2012. Accordingly, this would not be an appropriate prospective change to risk exposure, but rather an inappropriate imposition of the effect of the realization of a risk for which TransCanada has not been at risk. TransCanada argued that it would only be appropriate to expose it to risk of variances from the current starting point; it would be inappropriate to expose TransCanada to risk around any forecast throughput levels.

TransCanada indicated that if actual throughput ends up being in line with its Low Case throughput forecast, then based on CAPP's forecast, the TSA balance would reach $750 million by the end of 2014. Adding the additional $200 million that CAPP recommended adding to the LTAA over 2013 and 2014, plus a 2012 shortfall of $85 million to $185 million (described below), TransCanada suggested that this would imply that the total amount of deferrals in the event of the low supply case throughputs would be $1,035 million to $1,135 million by the end of 2014. While this would mean that the TSA balance would have risen above the approximately 36 per cent trigger, TransCanada suggested that it presumed that the shortfall would continue to grow as a regulatory proceeding examined what to do next.

While CAPP did not expressly say so, TransCanada argued that CAPP did not believe that TransCanada's Case 1 throughput forecast, upon which CAPP's proposal relies, is achievable. To support this conclusion, TransCanada pointed to comments from CAPP stating that Case 1 was "very challenging" and "perhaps optimistic", and to one of CAPP's experts expressing a lack of confidence in the forecast. TransCanada argued that the Board should consider this in assessing the weight to give, or probability to assign, to TransCanada's Case 1 throughput forecast.

With reference to the potentially large cash deferrals under the CAPP proposal, TransCanada also suggested that large, longer-term deferral accounts may give rise to additional risks not identifiable at the outset, pointing to the recent experiences of EGNB as evidence of this. EGNB had a large deferral asset, representing approximately 38 per cent of its total investment, which had been established to allow EGNB to recover the shortfall between revenues and costs during the period where EGNB expanded throughout the province. TransCanada indicated that EGNB ultimately took a write-down of $283 million, approximately 60 per cent of its rate base,

stemming from a toll and tariff regulation enacted by the New Brunswick government that created limits on EGNB's rates. TransCanada suggested that an intervening event could also eventually preclude TransCanada from recovering its deferrals.

TransCanada's expert witness, Mr. Engen, suggested that investors would see the deferrals under CAPP's proposal as a high-risk proposition, and that the larger they become the more risky they become, with negative impacts on cash flows and credit matrix. Mr. Engen also suggested that continued predictable and stable Mainline cash flows are a fundamentally important issue to investors. TransCanada added that large deferrals of cash flows can lead to lower funds from operations and higher debt, two factors that impact the credit matrix of the Mainline. Accordingly, this could ultimately compromise the Mainline's financial integrity and hinder its ability to attract capital. TransCanada further indicated that if the Mainline were downgraded as a result of this proceeding, this would have quite a profound impact throughout Canada. TransCanada submitted a Moody's report as part of its filing, which indicated that, "[w]hile limiting toll increases might be beneficial from a competitive point of view, revenue deferrals are negative from a cash flow perspective."

TransCanada disagreed that the TSA balance would be financed with short-term debt, and also disputed the assumed 2.5 per cent rate on that debt. TransCanada indicated that the proposed carrying charges for the TSA should equal the Mainline's cost of capital, the rate normally established for carrying charges. According to TransCanada, compared with its proposed rate of return on rate base, the 2.5 per cent carrying charges would create a loss of $55 million over five years if actual throughput tracked its Case 1 forecast. The loss would be even higher if the low throughput case materialized. TransCanada suggested that only allowing a debt return to the TSA would implicitly breach the regulatory compact. The proposed carrying charges would not compensate the Mainline for the risk involved in the TSA, and would also be inadequate because the probability of TransCanada recovering the costs in the TSA has an asymmetric distribution since there is a chance that the balance might not be recovered with no offsetting mechanism for over-recovery. TransCanada acknowledged that carrying charges set at the level of the return on rate base would be an improvement to the CAPP proposal.

TransCanada contended that CAPP's multi-year tolls proposal would breach the regulatory compact by jeopardizing the opportunity to recover prudently incurred costs because of the large LTAA and TSA deferrals, the low TSA rate of return, and an imbalance of risk and reward. The CAPP proposal increases the risk of non-recovery of costs to a point where the opportunity for recovery may no longer be reasonable. As discussed in Chapter 9, TransCanada also submitted that the cost of capital that CAPP recommended under its proposal was too low.

With regard to the 2014 to 2020 forecast of Mainline rate bases and revenue requirements provided in response to CAPP Information Request 2-47, TransCanada indicated that the information it was providing included high level assumptions, since in its most recent annual budget cycle, it only completed a forecast for 2012 and 2013. In general, the assumptions used were based on its cost estimates for the 2013 test year. TransCanada stated that, "[t]he 2013 test year revenue requirement provides a reasonable basis for a high level long-term revenue requirement forecast under Restructuring Proposal assumptions", but if TransCanada were to lock in tolls for a long period of time, significantly more analysis of future costs would be

required. Such an analysis would need to reflect a range of potential outcomes, and a more conservative approach might be appropriate. This process would take significant time.

TransCanada's assumptions for 2014 to 2020 included:

- TBO costs and pipeline integrity costs would stay constant at 2013 levels.
- The following costs would rise two per cent annually, starting from their 2013 levels, to reflect inflation: OM&A, storage operating costs, insurance deductible costs, NEB cost recovery, and regulatory proceeding and collaborative costs.
- Terminal negative salvage of $50 million per year was included starting in 2015, which TransCanada said was "a placeholder pending the outcome of the [NEB] Land Matters Consultation Initiative. Until a process is determined to collect and set aside abandonment funds this placeholder cannot be estimated with any degree of accuracy."
- Expenses for depreciation and the amortization of the LTAA were based on the average 2013 RP depreciation rate, and the RP-recommended LTAA additions.
- Rate of return was held constant at the requested 2013 level, other than with respect to adjustments for debt costs, which were forecast based on the actual profile of funded debt maturities and assuming no new debt issuances, a 60-40 debt-equity ratio, and the average unfunded debt rate forecast for 2014.
- Income taxes were based on the forecast 2014 tax rate of 25.5 per cent, and a simplifying assumption that Capital Cost Allowance would stay constant although TransCanada indicated that it can be expected to decline over time.
- Municipal and provincial capital taxes were increased by three per cent per year starting from the 2013 amount, based on the rate of increase during the 2007-2011 Mainline Toll Settlement.
- Electric costs were based on the Case 1 flow forecast, a two per cent annual inflation rate, and the forecast of 2014 gas and power prices. Tax on fuel assumptions were held constant with 2013.
- For rate base, several assumptions were employed, including:
    - limiting plant additions to an estimate of maintenance and general plant capital, based on recent years' capital expenditures, and
    - Retiring approximately $60 million of gas plant in service between 2014 and 2020, with $10 million spent on net retirement costs.
- Cost to NGTL of the ASE was based on a forecast of NGTL TBO daily contract quantity multiplied by a forecast of the applicable toll.
- Where needed, toll forecasts were based on these revenue requirement assumptions, the Case 1 throughput forecast, and the RP toll design and service changes, including the forecast for $20 million of extra annual discretionary revenues.

With respect to a revenue shortfall from 2012, TransCanada indicated that based on its most up-to-date flow forecast from mid-year 2012 and the interim tolls in place throughout 2012, the Mainline's 2012 revenues would be between $1.5 billion and $1.6 billion. Therefore, TransCanada was not expecting a significant change to the cumulative deferral accounts balances for 2012, based on its forecast 2012 RP revenue requirement of $1.589 billion. However, TransCanada pointed out that CAPP's analysis assumed 2012 revenues would be approximately

$1.685 billion, which was CAPP's forecast of the 2012 revenue requirement. Accordingly, TransCanada indicated that CAPP's analysis was missing an expected 2012 shortfall of $85 million to $185 million.

TransCanada concluded that there was no merit in pursuing the details of the CAPP concept given its difficulties and uncertainties.

TransCanada recognized that it would be kept whole under the CAPP proposal provided its throughput forecast materialized and there was no major error in its cost forecast. TransCanada submitted that whether the CAPP proposal provided the Mainline a reasonable opportunity to recover its costs was an opinion for the Board, based on the evidence before the Board in this proceeding.

Views of the Board

Given the forecast recovery of throughput on the Mainline, we have determined that it is appropriate and necessary to implement the LTAA and TSA. The LTAA will be used to defer a portion of the Mainline's revenue requirement by adding it to rate base, and amortizing it over a number of years. The TSA will allow for a short-term deferral of costs, with immediate revenue shortfalls being promptly followed by offsetting surpluses. Deferring costs in these two accounts allows tolls to be lowered to levels that are just and reasonable, without disallowing Mainline costs.

We are setting multi-year fixed tolls for the Mainline, at the levels outlined in Section 12.1. These tolls are expected to remain in place through the end of 2017, subject to our further explanation, below.

As indicated in Chapter 4, given the expected recovery of throughput, we are of the view that TransCanada should be afforded the time and tools to adapt to its business environment, and the time to take advantage of the opportunities offered by this Decision, before Mainline costs are disallowed. We find that this Decision will provide TransCanada with a reasonable opportunity to recover its costs, over a reasonable period of time. This opportunity arises through a combination of factors, including the specific levels at which we are fixing multi-year tolls and the discretionary pricing flexibility described in Section 8.1.

We are of the view that, provided throughput recovers adequately, future tolls (that is, tolls determined after the fixed period) could be just and reasonable even while allowing TransCanada to recover Mainline costs deferred through the LTAA. With respect to the possibility of throughput being lower than forecast, our concern related to future shippers' potential exposure to deferred costs is mitigated because we have found that Mainline tolls cannot continually increase each year in response to throughput declines. Moreover, to limit intergenerational equity issues, we have set the multi-year fixed FT tolls at the highest competitive level, thereby limiting cost deferrals to those that are necessary to produce near-term just and reasonable tolls.

TransCanada's exposure to risk and deferrals under the multi-year fixed tolls approach

If actual throughput approximates the low supply case, then, as suggested by TransCanada, we find that the CAPP proposal may mean TransCanada is at significant risk of not recovering some Mainline costs. However, that risk would not be the result of the CAPP proposal. Based on current and forecast circumstances, we find that there is no reasonable tolling proposal that does not place TransCanada at significant risk of non-recovery of some costs if actual throughput approximates the low supply case. As explained in Chapter 4, we are of the view that TransCanada has never been shielded from this sort of risk.

TransCanada suggested that a prospective at-risk approach must be centred on current throughput. In our view, we are not implementing an at-risk approach. Nonetheless, we strongly reject TransCanada's suggestion. If we were to implement a prospective at-risk approach, then it would be appropriate to use forecasted throughputs. If throughput were nearly certain to substantially increase, for example, disregarding forecasts could virtually assure excessive returns.

Deferring significant cash flows can impact a company's credit matrix and could result in negative bond rating actions. However, we note TransCanada was comfortable with the cash flow impacts of its depreciation proposal (under the Restructuring Proposal). These impacts were very similar to the cash flow impacts of the LTAA deferrals in CAPP's analysis, though we acknowledge the LTAA additions we are approving will be different. We recognize that the TSA may result in additional large cash flow deferrals and increased cash flow variability relative to the Restructuring Proposal, which may impact TransCanada's credit matrix. This contributes to our view that it is important to include off-ramps in implementing the multi-year fixed tolls approach, and, subject to our further explanation below, we find that the off-ramps proposed by CAPP are appropriate.

While we recognize the potential credit matrix and ratings impacts of fixing tolls for a multi-year period, particularly if throughputs approximate the low supply case, there is no reasonable tolling alternative that does not put TransCanada at significant risk of non-recovery of some costs in those circumstances. If actual throughputs are instead equal to or greater than the Case 1 forecast, the cash deferrals placed in the TSA will be relatively short term in nature.

There are also potentially credit-supportive aspects of establishing multi-year fixed tolls in accordance with this Decision, including the higher return on rate base (discussed further in Chapter 9) and the incentive mechanism (discussed in Section 12.3), which could further increase rates of return. Additionally, we find that the multi-year fixed tolls will increase TransCanada's accountability, which combined with other aspects of this Decision, such as the significant discretionary pricing flexibility being granted, will contribute to the Mainline being positioned to be more competitive.

Given the significantly different circumstances and characteristics of EGNB as compared to the Mainline, we find that the EGNB events referred to by TransCanada are not relevant.

Forecasts used by CAPP

As described above, CAPP's analysis relied in large part on TransCanada's 2014-2020 revenue requirement forecasts.[78] Like any forecast, we recognize that assumptions underpinned TransCanada's forecasts. We are of the view that TransCanada's revenue requirement estimates, combined with CAPP's and TransCanada's subsequent submissions related to them, provide a sufficient basis upon which to implement multi-year fixed tolls in this Decision.

Length of term for multi-year fixed tolls

We find that it is appropriate to fix tolls so that full cost recovery is forecast at the end of 2017. This allows sufficient time for throughput to recover under the Case 1 forecast, limits additional uncertainty associated with longer-term forecasts, and limits intergenerational equity concerns associated with the TSA.

We also find that CAPP's recommendations are appropriate with respect to the circumstances that would lead to the multi-year fixed tolls being in place for less time than expected (that is, revisited before 31 December 2017). Namely, we expect TransCanada to file a tolls application in the event that: the TSA balance is approaching, and expected to reach, one-ninth of the size of rate base;[79] circumstances unfold such that TransCanada expects that the TSA balance will become unrecoverable; or the negative TSA balance is nearly, and expected to be eliminated prior to the 2017 toll year.

If there is a negative TSA balance when tolls are revisited, then that amount will be recoverable in future years, provided that the Mainline's fundamental risk has not materialized. If fundamental risk materializes, we do not intend that the TSA will be singled out or given special consideration for potential cost disallowance. Rather, we intend that if there is a consideration of cost disallowance, all aspects of the Mainline's revenue requirement or cost structure would be put in issue. If the TSA balance is positive when tolls are revisited, the Board will then determine the appropriate method for disposing of that balance to the benefit of shippers (for example, over a single year as a credit against the gross revenue requirement, or as a credit against the LTAA).

We also note that in the event that TransCanada disposes or repurposes significant Mainline assets, such as for conversion to oil service, this would also likely warrant revisiting Mainline tolls. In addition, we note that in such an event, a determination may be needed with respect to the appropriate share, if any, of the LTAA and TSA that should follow the assets that are disposed or repurposed.

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[78] TransCanada provided its forecasts in response to CAPP Information Request 2-47, filed as Exhibit B10-7.

[79] The one-ninth of rate base trigger (calculated where rate base does not include the TSA balance) is equivalent to the 36 per cent equity ratio trigger recommended by CAPP, but reflects our view that the TSA should not be deemed as only debt funded.

TSA carrying charges

We agree with TransCanada that the carrying charges on the TSA should be the same as the rate of return on rate base, reflecting the overall cost of capital of the Mainline.[80] While the allowed return on rate base already takes into account the risks associated with the TSA, we are not persuaded that establishing carrying charges at that level would overcompensate TransCanada. Even if deferred revenues include a premium for the risks of the TSA, the TSA balance is exposed to the same level of cost recovery risk as the rest of the Mainline's rate base and we find that TransCanada should be compensated accordingly. Also, we are not prepared to assume how TransCanada will finance the TSA; we deem the entirety of the Mainline's financing needs to be met with a 60-40 debt-equity split, rather than deeming how individual accounts are financed.

Awarding TSA carrying charges that are lower than the return on rate base, as suggested by CAPP, would provide further incentive for TransCanada to minimize the TSA. However, we are of the view that, particularly when combined with the incentive mechanism established in Section 12.3, the multi-year fixed tolls proposal will provide sufficiently strong incentives for TransCanada to minimize these deferrals and to better align the interests of TransCanada and Mainline stakeholders.

Parameters for forecasting future costs and revenues

TransCanada will have to provide, in its Compliance Filing, the precise amounts that will be added to the LTAA, calculated in accordance with the parameters we are establishing. In addition, TransCanada will have to provide the precise forecasted annual revenue shortfalls and surpluses, which will be used for the incentive mechanism described in Section 12.3. To calculate these amounts, TransCanada will have to amend its forecast of revenues and costs through 2017 to account for our findings in this Decision. Accordingly, below we provide some additional direction to establish how TransCanada must do so.

For the most part, we find that in its response to CAPP Information Request 2-47, TransCanada used reasonable assumptions for forecasting revenue requirements through 2017. We direct that TransCanada use the same assumptions when preparing its Compliance Filing, with the following exceptions:

- In all instances, forecasts shall reflect our determinations in other parts of this Decision. For example, forecasts shall reflect the approved depreciation parameters, rate of return on rate base (which also applies to the TSA), and LTAA additions.
- For 2014 onwards, we accept CAPP's Capital Cost Allowance assumptions. We find that they are appropriately more conservative than TransCanada's assumptions.
- For TBO cost forecasts, we accept TransCanada holding TBO costs constant at 2013 levels. However, this should be based on the updated 2013 TBO costs filed in Exhibit B17, on Adobe page 20.

[80] TSA carrying charges should be compounded in the same manner as return on rate base.

We note that in forecasting DMR, TransCanada used the low end of its estimates of the incremental miscellaneous revenue that would result from its proposals to eliminate RAM and have flexible pricing for IT and STFT services. We are of the view that using this estimate is conservative, particularly in the context of the greater pricing flexibility we are approving, and the fact that the tolls outlined in Section 12.1 are slightly higher than the proposed RP toll levels. However, given the high-level assumptions used to prepare the revenue requirement forecasts for 2014 onward, and the risk and return associated with the multi-year fixed tolls proposal, we find that it is appropriate to build in the additional conservatism created by these DMR estimates.

Parameters for establishing the LTAA additions

In implementing the multi-year fixed tolls, we are establishing the parameters that will determine the precise LTAA additions, rather than pre-specifying these amounts. While the extensive evidence in this proceeding allows us to understand the approximate amounts that will be added to the LTAA and that will be expected to accumulate in the TSA, TransCanada will calculate and submit the precise amounts in its Compliance Filing, in accordance with this Decision. In particular, TransCanada's Compliance Filing shall show the 2012 LTAA addition calculated in accordance with item 1, below, and the constant annual 2013-2017 LTAA additions calculated in accordance with item 2.1.

The amounts that will be placed in the LTAA will be as follows:

1. In 2012, the LTAA addition shall be the amount that eliminates the 2012 revenue shortfall (based on the revenues collected in 2012 while interim tolls were in place and the 2012 revenue requirement calculated using actual 2012 costs).[81]
2. In each year from 2013 through 2017:
   2.1. the same annual LTAA addition will be made, calculated as the constant annual amount that causes the TSA balance to be zero at the end of the 2017 toll year, based on TransCanada's Case 1 throughput forecast submitted in this proceeding in Exhibit B40 (starting from 1 July 2013, in the manner described below) and based on the Board's findings and directions in this Decision; unless
   2.2. if in 2017 or an earlier year, the negative TSA balance would be eliminated if an LTAA addition were made according to item 2.1, the LTAA addition in that year shall instead be the smallest amount that would eliminate the negative TSA balance in that year, and no LTAA additions would be made in subsequent years.

Revenues for 2013 shall be calculated as the sum of an up-to-date forecast of actual revenues from the first 6 months of 2013 and a forecast of the revenues for the second half of 2013. We note that monthly data was not provided for the updated Case 1 throughput forecast (from Exhibit B40), but that it was provided for the original Case 1 throughput forecast in response to NEB Information Request 2.62 (Exhibit B8-2).

[81] We recognize that TransCanada demonstrated that CAPP's analysis presumed higher 2012 revenues than TransCanada was expecting. In addition, among other differences from CAPP's analysis, we are approving a higher return on rate base than CAPP used.

Accordingly, for calculating forecast revenues for the second half of 2013, we direct that the 2013 updated Case 1 throughput forecast (from Exhibit B40) be adjusted to a monthly level, based on the pro-rata monthly share of 2013 throughput that was in the original Case 1 forecast. When final actual revenues from the first six months of 2013 are known, any difference from the forecasted amount shall flow into the TSA and be excluded from calculations for the purpose of the incentive mechanism, described in Section 12.3.

Forecast costs for 2013 shall be calculated based on the appropriate information provided during the proceeding, and not be updated based on any new 2013 cost information.

Compliance Filing and other future filings

To implement the multi-year fixed tolls approach described in this chapter, the Board directs TransCanada to prepare and file with the Board a Compliance Filing containing tolls for all paths and services on the Mainline for the years 2013 to 2017. In its Compliance Filing, TransCanada must include, among other things, the forecasts of annual revenue shortfalls and surpluses, the forecast TSA balances and the expected additions to the LTAA. TransCanada must provide sufficient detail in its filing to allow the Board and interested parties to confirm that TransCanada has adhered to all of the Board's directions in this Decision.

As part of the Compliance Filing, TransCanada must also prepare and file with the Board revised Tariff pages for all proposed changes that the Board has approved showing all changes black-lined from the current version, together with a clean version.

As directed in Section 8.1, TransCanada must also consult with stakeholders and file the following with the Board as part of its Compliance Filing:

- the information to be posted for shippers to ensure transparency in the way TransCanada sets bid floors; and
- the information to be contained in quarterly reports to the Board regarding TransCanada's management of bid floors.

The Board directs TransCanada to file its Compliance Filing with the Board by 1 May 2013 and to serve a copy on all RH-003-2011 interested parties. Parties wishing to comment on TransCanada's Compliance Filing shall provide their comments to the Board and TransCanada within 14 calendar days and TransCanada shall have seven calendar days to file any reply. TransCanada must describe this comment process in the cover letter to its Compliance Filing so all parties are aware of it.

In addition, we direct TransCanada to modify the Mainline's quarterly surveillance reports in an appropriate manner that will provide the Board and parties with relevant information about such matters as the TSA and the incentive mechanism, in addition to information that TransCanada already provides.

Decision

We approve multi-year fixed tolls, to be in place through 31 December 2017, in accordance with the above details (in Section 12.1 and 12.2) including how tolls shall be calculated, potential off-ramps, the LTAA additions, the TSA carrying charges, and the exception for setting the Sales Meter Station Charges.

12.3 Mainline Incentive Mechanism

Incentives have been a prominent feature in many negotiated toll settlements. In this proceeding, CAPP, ANE and MAS each proposed a different incentive mechanism.

Views of Intervenors

CAPP

CAPP proposed an incentive mechanism that would see TransCanada retain 20 per cent of annual net revenues above the net revenues forecast at the outset of the implementation of the CAPP multi-year fixed tolls proposal. The remaining 80 per cent would flow into the TSA, and the incentive would remain in place until the negative TSA balance is eliminated. To mitigate the possibility of a windfall, TransCanada's annual benefit from this mechanism would be capped at $25 million, after tax. In any year where net revenues are lower than forecast, the incentive mechanism would not apply, such that the full revenue surplus or shortfall would flow into the TSA.

CAPP indicated that whereas past Mainline incentives have focused on a specific set of cost-saving measures, its incentive mechanism would incent all cost efficiencies and, more importantly, revenue maximization, thereby encouraging active management of the Mainline's utilization. This mechanism would give TransCanada maximum flexibility to find innovative ways to increase revenues and reduce costs. With respect to revenues, CAPP noted that TransCanada estimated that its proposed discretionary pricing flexibility would generate between $20 million and $80 million of incremental annual revenues. Care would have to be taken in exercising this flexibility.

CAPP anticipated that because throughput is expected to grow and revenue requirements expected to decrease, the sooner the negative TSA balance is eliminated, the sooner tolls can decrease. The potential for increased ROE for TransCanada and early retirement of the TSA would strongly align interests of Mainline customers and TransCanada shareholders.

CAPP submitted that between 2001 and 2010, the actual Mainline ROE was between 4 and 184 basis points higher than the allowed ROE, mainly due to incentive earnings. By comparison, CAPP indicated that in a year where net revenues were $30 million higher than expected, the incentive mechanism would see TransCanada keep $6 million, increasing the Mainline's ROE by approximately 30 basis points (based on a 40 per cent equity thickness). Accordingly, CAPP suggested that its incentive mechanism fell within the range of previous programs.

ANE

ANE proposed an incentive mechanism where TransCanada would get an incentive payment if total revenues in a calendar year exceeded the Board-approved revenue requirement. TransCanada would keep 10 per cent of the first $160 million of revenues above that year's approved revenue requirement, and 20 per cent of any incremental revenues above that point. The incentive would be in place for an initial period of two years, starting in 2013. After that, a more permanent mechanism could be implemented. Sharing would be suspended for any calendar year in which TransCanada files for an increase in that year's FT tolls. This would prevent TransCanada from increasing its incentive payment by raising FT tolls and reflect the fact that FT toll increases would indicate that shippers are not realizing the benefits of increased revenues. ANE indicated that the sharing mechanism would not be needed in the event that the Board denies proposals to allow discretionary pricing flexibility.

According to ANE, absent a specific incentive mechanism, TransCanada lacks short-term incentives to maximize discretionary revenues. ANE noted that TransCanada put forward many factors that it would consider when setting discretionary service bid floors within the flexibility it was seeking, and ANE submitted that TransCanada would need to devote significant efforts, and redeploy existing resources, in order to take full advantage of this flexibility. ANE emphasized that discretionary throughput and revenues have grown, are highly variable, and are now extremely important on the Mainline. ANE also pointed out that TransCanada predicted that the combined incremental annual revenues from its proposed discretionary pricing flexibility and the elimination of RAM would be between $70 million and $230 million. The $160 million range is large, equivalent to approximately 10 per cent of the Mainline's revenue requirement, and equates to ANE's proposed sharing band. ANE believed that the potential revenue gains may be even greater than the upper-limit of TransCanada's estimates, particularly if TransCanada is given more flexibility than it requested. ANE recommended the higher sharing percentage (20 per cent) above the $160 million point to encourage the greater effort that such amounts would require. ANE submitted that the 10 per cent and 20 per cent sharing levels appropriately balance the value to TransCanada and shippers and provide adequate incentive for TransCanada to appropriately focus its efforts. ANE acknowledged that exogenous factors, such as weather, also impact discretionary revenues, but suggested that its incentive strikes the right balance by incenting TransCanada to maximize revenues while still flowing through most revenue variations to shippers.

When asked about how its incentive compares to an incentive based on net revenues (revenues less costs), ANE indicated that it is not necessarily a bad thing to also introduce costs to an incentive. However, ANE chose to focus on revenues because that is where it saw the greatest need for TransCanada to focus.

ANE submitted that its proposal was consistent with past Board guidance and findings related to incentive mechanisms, which ANE summarized.

MAS

MAS proposed that TransCanada keep some of the savings it achieves with regard to OM&A and debt capital costs, to allow TransCanada to offset some of the equity return that TransCanada would not earn on NOL assets. Specifically, in any year between 2012 and 2014, if the combined OM&A and debt capital costs were below the Board-approved amount, TransCanada would keep 100 per cent of the savings up to the point where it earned back half of the forgone NOL ROE, and 50 per cent of savings beyond that amount. If these combined costs were greater than the approved amount in any year, incentive payments for subsequent years' savings would be calculated based on savings net of the prior year's cost overruns. For illustrative purposes, MAS showed that these costs, as filed by TransCanada, are $433 million in 2012 and $421 million in 2013 (approximately 40 per cent of which is OM&A). MAS emphasized that none of TransCanada's cost savings should be permitted to come at the expense of system integrity or reliability, and that TransCanada would have to itemize and justify cost savings for each year at the Tolls Task Force and could be subject to further Board scrutiny.

Views of TransCanada

TransCanada indicated that it was not opposed to incentive mechanisms, provided they balance risk and reward, and TransCanada's expert, Mr. Reed, suggested that elements of incentive regulation are a reasonable means of providing appropriate incentives to a pipeline and can benefit shippers by lowering tolls. However, TransCanada submitted that, particularly in current circumstances, additional incentives are not needed to create additional revenues or reduce costs or to protect the viability of the Mainline. TransCanada contended that it has always sought to decrease costs and increase revenues, and pointed to the large decline in the Mainline revenue requirement over the past ten years and the Mainline's changing services and service attributes. Looking backwards, TransCanada defended the fact that it has earned ROEs above the allowed ROEs as "evidence that the system is working. It is evidence that incentives drive behaviour."

TransCanada also argued that it did not propose a risk-sharing or incentive mechanism related to revenue as a result of its proposal for discretionary pricing flexibility, because it would be impossible to set a benchmark. TransCanada argued that after implementation of the RP, or any of the other proposals, the Mainline will be operating under markedly different circumstances and therefore nobody has the data to set benchmarks for risk or incentive mechanisms. Mr. Reed also suggested that incentive mechanisms are usually best left to negotiations between parties.

Views of the Board

Successfully confronting the challenges facing the Mainline will require TransCanada to take a very active role. If TransCanada succeeds, its shareholders and other Mainline stakeholders could benefit from lower full-cost based tolls which would make the Mainline more competitive. We find that an appropriately structured incentive mechanism will help promote this result. It will also help align the interests of TransCanada and its stakeholders, and create a bridge toward a new approach to customer relations and more innovative management. We also see this as an appropriate step toward future mechanisms that include downside risk in addition to potential upside for TransCanada.

This Decision will substantially change some of the Mainline's services and tolling, and this may create uncertainty about the appropriate benchmarks for the incentive mechanism. However, given the potential benefits from immediately implementing an incentive mechanism, we find that this uncertainty should not be a reason to forestall the implementation of an incentive. Rather, the uncertainty should be considered when setting the incentive parameters, such as the sharing percentages and benchmarks.

We find that an incentive based on total net revenues is most appropriate at this time. We note that FT tolls are equivalently reduced by incremental cost savings or the equivalent level of incremental discretionary revenues. Total net revenue captures both sides of this tolling equation. ANE and MAS proposed incentives which, respectively, emphasized the importance of TransCanada appropriately utilizing the new discretionary pricing flexibility and of reducing select costs. However, there are many potential ways to maximize revenues and reduce costs and we find that TransCanada is in the best position to determine where to do so most effectively and efficiently. An incentive based on total net revenues will incent TransCanada to appropriately focus its efforts where it will best achieve results. We acknowledge that discretionary revenues, in particular, are somewhat influenced by exogenous factors such as weather. Nonetheless, we are of the view that TransCanada will have a sufficiently strong influence over revenues to make a net revenue incentive appropriate.

Significant judgment is required in picking the specific parameters for an incentive mechanism, including the sharing percentages and the cap on sharing, if any. In this case, we are of the view that it is appropriate to allow TransCanada to keep 20 per cent of the first $125 million of net revenues over and above the approved threshold amount per year. This corresponds to CAPP's recommended cap of $25 million on TransCanada's annual incentive payment. This strikes the appropriate balance of providing TransCanada with a strong incentive, while ensuring that shippers receive a significant benefit from any positive variances from forecast. In terms of additional net revenues in excess of $125 million, we find that it is appropriate for TransCanada to keep 10 per cent of such amounts. This lower percentage limits the potential windfall to TransCanada, which we find is particularly important given the possibility for exogenous circumstances to potentially cause large variations (for example, significant weather events). It also still recognizes that it is imperative that TransCanada effectively maximize revenues and limit costs in every circumstance.

One exception to the above parameters will apply for 2013. To reflect the fact that the changes in the Decision will take effect on or around 1 July 2013, TransCanada will keep 20 per cent of additional net revenues up to $62.5 million above which TransCanada will keep 10 per cent.

TransCanada's Compliance Filing (described in Section 12.2) will establish the net revenue requirement thresholds. The thresholds will be equal to the expected revenue shortfall or surplus in a particular year. The incentive mechanism will apply to the net revenues in each year from 2013 through the earlier of 2017, the year the negative TSA balance is eliminated, or the last year in which the multi-year fixed tolls remain in place.

There are two additional modifications to the above. The first is to exclude terminal salvage/abandonment costs from the incentive. Specifically, the incentive amounts will exclude the difference between the actual terminal negative salvage costs in any year and the placeholders (described in Section 12.2) used for the purpose of forecasting the annual revenue shortfalls and surpluses. This will affect the calculation of the incentive amounts beginning in 2015, or sooner if terminal salvage/abandonment costs are incurred before 2015.

The final modification relates to the possibility that in the year that the negative TSA balance is eliminated, the actual LTAA addition will be adjusted downward according to item 2.2 in the Views of the Board in Section 12.2. In such a case, the incentive in that final year will be calculated as though the LTAA addition were instead equal to the full amount that was forecast in the Compliance Filing (that is, the amount pursuant to item 2.1 in Section 12.2).

For illustrative purposes, if the Board-accepted Compliance Filing were to forecast a 2014 net revenue shortfall of $200 million, and the actual 2014 net revenue shortfall were $25 million, TransCanada would receive an incentive payment of $30 million. Net revenues in this case are $175 million above the threshold; TransCanada would keep $25 million of the first $125 million of this amount (0.2 * $125 million) and $5 million of the remaining $50 million (0.1 * $50 million).

As discussed in Section 11.2, pipeline safety is of paramount importance to the NEB, and it will take all available actions to protect Canadians and the environment. We affirm that under no circumstance shall TransCanada pursue any cost savings that could have negative impacts on pipeline integrity or safety.

Decision

An incentive mechanism based on the above parameters shall be in place during the term that the multi-year fixed tolls are in place.

Chapter 13

Mainline Regulatory Process

In its Application, TransCanada outlined the process that led to the filing of the Restructuring Proposal. TransCanada explained that it initiated a consultative process within the Mainline Tolls Task Force (TTF) in October 2009 to address throughput and system utilization developments and to discuss possible rate design, cost allocation and services responses. TransCanada then developed a comprehensive Mainline Competitiveness Package that included toll, tariff, service and cost allocation changes. TransCanada presented this package to stakeholders in March 2010 with the objective of reaching a negotiated resolution. Discussions with the TTF and the Alberta System Tolls, Tariff, Facilities and Procedures Committee did not result in a settlement.

Accordingly, TransCanada conducted further consultations in 2010 and reached an agreement with some stakeholders; this agreement formed the basis of TransCanada's application for 2011 Mainline interim tolls. However, after filing the 2011 Mainline interim tolls application with the Board on 9 December 2010, certain stakeholders opposed it and the Board subsequently did not approve it.

In early 2011, TransCanada conducted further consultations, and while it reached another agreement with some stakeholders, that agreement was also opposed and not implemented. The Board, therefore, directed TransCanada to file its application for 2012 and 2013 Final tolls on 1 September 2011. TransCanada stated the Application, which set out the Restructuring Proposal, contained various elements that it or its stakeholders had supported during the consultation and negotiation processes. In addition, TransCanada advised the Application contained other elements it believed to be necessary and integral parts of a comprehensive package that would address the circumstances it was currently facing.

During the course of this proceeding, the Board asked all parties questions about the effectiveness of the regulatory process and whether it could be improved. Below is a summary of some of the responses to those questions.

Views of TransCanada

TransCanada submitted it needs to be able to change products and services quickly if there are services that are not working or if it can develop new services and price them to attract incremental volumes or keep existing volumes on the system. TransCanada also stated that there should be an expedited procedure available if the pipeline is prepared to offer new at-risk products. An example of these products is a load retention service. TransCanada submitted rather than a command and control approach to regulation, the pipeline should be provided with a very diverse tool kit and then report on the activities.

TransCanada noted a meaningful difference between the Canadian process and the U.S. process is the possibility of filing contested settlements. Under the current voting mechanism at the TTF,

there is essentially a veto right, where parties can "hard oppose" a proposal.[82] At the FERC, the pipeline and a majority of the parties can file contested settlements that are not unanimous. This typically involves a mini-hearing process where some evidence is taken to adjudicate the reasonableness of the contested settlement.

Views of Intervenors

APPrO submitted changes should be made in the regulatory approach that would allow the pipeline more flexibility for developing services and setting prices. Consistent with this flexibility is more responsibility for the impacts of pricing decisions; that is, the assumption of more risk. APPrO stated that those areas in which competition can function effectively can be regulated with a "lighter hand". However, a "recourse rate" must be maintained for captive customers.

CAPP submitted it would help if the Board affirmed some basic concepts such as the integrity of the standalone principle for the Mainline so that Mainline costs of underutilization are not reallocated by means of an affiliate transaction like the ASE. The concept of fixing tolls for a period of years could also serve to reduce the need for further hearings.

CAPP noted this has been an unusual case and it is difficult to know how the task force and other negotiating processes would have fared had TransCanada not proposed the transfer of costs and risks to NGTL, that is the ASE. In CAPP's view, the task force should be given an opportunity to review its process and make any changes to enhance its effectiveness.

IGUA suggested the time has come for the NEB to become engaged in TransCanada's settlement process by setting clear timelines in regard to future settlement discussions and issuing clear guidelines concerning the Board's expectations about the overall framework to be used for the next generation of tolling settlement discussions.

ANE stated regulation can respond to changes in a fast changing world by having a focus on the future. ANE submitted TransCanada should be given the correct tools to react to market changes. Specifically, ANE noted regulation could change to allow for increased pricing discretion and risk-sharing.

Centra noted negotiation could be effective as long as the Board provides sufficient direction prior to negotiations commencing. According to Centra, all parties must be aware of the Board's views on the key "boundary conditions" before commencing negotiations.

MAS stated regulation must be forward looking to embrace an ever changing landscape for the natural gas market. Regulatory direction should lay out the principles and framework that TransCanada and its shippers need to consider and it should reflect the changes that have already occurred and that continue to take place in North America.

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[82] This means that a Task Force Member can vote against a resolution or abstain and indicate that it may actively oppose the proposed resolution or propose an alternate resolution at an NEB hearing.

Tenaska submitted the regulatory regime should be flexible enough to respond effectively to market changes without having to be modified on a continuous basis.

ADOE submitted the current regulatory process is robust and sufficient to address the issues raised by the Application. ADOE believes the likelihood of success in settlement discussions following this case will depend very much on the guidance the Board can provide on certain key issues, such as the regulatory compact, adherence to the stand-alone principle, and the principle of no acquired rights or obligations.

Views of the Board

We appreciate the responses given by parties to our questions about how to improve the regulatory process.

We understand that the three-year negotiation and regulatory cycle, which was used to resolve matters in this proceeding, may not be responsive to the needs of the business environment in which the Mainline operates. However, in our view, this proceeding was exceptional. This Application was very complex in terms of the breadth and depth of issues that were under consideration. TransCanada and its stakeholders have resolved many issues through the TTF process in recent years.

At the same time, we believe the negotiation and regulatory processes can be improved.

Negotiation process

Some parties suggested that the Board set time limits for the negotiation process. We are not prepared to dictate how much time parties should allow for the negotiation process. At the same time, the Board is open to ideas that may improve the negotiating process. For instance, the Board may, upon request by the negotiating parties:

- hold a mini-hearing for discovery purposes or for the determination of an issue;
- hold a technical conference; or
- make its staff available to the TTF as a resource to provide historical information about how the Board has decided an issue in the past, without speculating on how the Board would rule in the future.

These are examples of suggestions that the TTF may wish to consider and advise the Board if any of them will be helpful in assisting the negotiation process.

Streamlined regulatory process

Parties should not hesitate to come promptly to the Board for adjudication if settlement negotiations are not, or are not expected to be, productive. As the Board has said many times, adjudication of an application is one of two doors to enter the regulatory process; the other door is the filing of a settlement. The Board has no preference as to which door

is used. In our view, the filing of an application or contested settlement is not an indication of failure in the negotiation process.

We are of the view that the regulatory process for implementing new service and pricing proposals can and should be streamlined. It is necessary for TransCanada and its shippers to have the tools to respond quickly to changes in the Mainline's business environment such that new products and services can be developed to better enable the Mainline to compete and to better serve the needs of shippers.

Accordingly, we have developed a streamlined process that applies to new Mainline service and pricing proposals. We believe this process will provide the Mainline, and its shippers, with the opportunity to develop new service and pricing proposals in a timelier manner while allowing for the fair consideration of issues. We have set out a generic timeline for the streamlined procedure as Appendix "IV" to this Decision. It will take ten weeks from the time the Application is filed to consider new Mainline service and pricing proposals pursuant to the streamlined procedure. The Board retains discretion to vary or amend the streamlined process as the circumstances require.

It is our opinion that with some modification, the streamlined procedure can apply to more than service and pricing proposals. A party may request the streamlined process apply to an application and the Board will make a determination on whether it is appropriate.

Appendix I

Toll Order TG-002-2013

ORDER TG-002-2013

IN THE MATTER OF the *National Energy Board Act* (Act) and the regulations made thereunder;

AND IN THE MATTER OF an application dated 1 September 2011, as amended, by TransCanada PipeLines Limited (TransCanada), NOVA Gas Transmission Ltd. (NOVA), and Foothills Pipe Lines Ltd. (Foothills) under Part IV of the Act for orders approving, among other things, tolls that TransCanada may charge for transportation services provided on its Mainline pipeline system (Mainline) between 1 January 2012 and 31 December 2013 under File OF-Tolls-Group1-T211-04 01 (the Business and Services Restructuring Application);

AND IN THE MATTER OF Hearing Order RH-003-2011;

AND IN THE MATTER OF certain proposals made by intervenors in the RH-003-2011 proceeding for decisions or orders that determine how tolls are to be fixed for Mainline transportation services for 2012 and beyond.

BEFORE the Board on 1 March 2013;

WHEREAS on 29 April 2011, TransCanada filed an application for approval of final tolls that it may charge for transportation services on the Mainline for 2011 (2011 Final Tolls Application);

AND WHEREAS on 1 September 2011, TransCanada, NOVA and Foothills filed the Business and Services Restructuring Application;

AND WHEREAS on 27 September 2011, the Board issued Hearing Order RH-003-2011 (Hearing Order) setting out the procedures to be followed for considering the Business and Services Restructuring Application;

AND WHEREAS on 9 September 2011, the Board issued Order TG-007-2011 and a letter decision disposing of the 2011 Final Tolls Application. That order and letter finalized 2011 tolls for Mainline transportation services and directed TransCanada to file additional evidence related to "flow-through" elements of the Mainline's 2011 revenue requirement. The Board directed that the additional evidence be examined in the RH-003-2011 proceeding;

AND WHEREAS on 16 November 2011, TransCanada filed an application to charge, on an interim basis, tolls relating to transportation services on the Mainline effective 1 January 2012 (2012 Interim Toll Application);

AND WHEREAS on 8 December 2011, the Board issued Order TGI-004-2011 disposing of the 2012 Interim Toll Application, which authorized TransCanada to charge, on an interim basis effective 1 January 2012, its then current tolls made effective under Order TG-007-2011, pending any future amending orders or final order by the Board concerning TransCanada's 2012 and 2013 tolls;

AND WHEREAS on 9 March 2012, in accordance with the process set out in the Hearing Order, certain intervenors proposed that the Board make certain decisions or issue certain orders that determine how tolls on the Mainline would be fixed for 2012 and beyond (Intervenor Proposals);

AND WHEREAS between 4 June 2012 and 5 December 2012, the Board held an oral public hearing examining the "flow-through" elements of the Mainline's 2011 revenue requirement, the Business and Services Restructuring Application and the Intervenor Proposals;

AND WHEREAS the Board's decisions on the "flow-through" elements of the Mainline's 2011 revenue requirement, the Business and Services Restructuring Application and the Intervenor Proposals are set out in its RH-003-2011 Reasons for Decision dated March 2013 and in this Order;

AND WHEREAS for the reasons set out in the RH-003-2011 Reasons for Decision, the Board has found it just and proper to grant such further and other relief, in addition to or in lieu of that applied-for;

AND WHEREAS for the reasons set out in the RH-003-2011 Reasons for Decision, the Board has determined that tolls calculated in accordance with that decision are just and reasonable:

THEREFORE, IT IS ORDERED, pursuant to subsections 19(2), 20(1) and Part IV of the Act, that:

1. TransCanada must, for accounting, tollmaking and tariff purposes, implement the directions and decisions outlined in the RH-003-2011 Reasons for Decision dated March 2013 and in this Order.

2. The applied-for 2011 revenue requirement is approved as final and any shortfall that results from the final 2011 tolls must be deferred and disposed of in the 2012 revenue requirement.

3. Interim tolls authorized in Order TGI-004-2011 and charged from 1 January 2012 to 31 December 2012 are hereby made final.

4. Any surplus or shortfall that results from final 2012 tolls must be recorded in the Long-Term Adjustment Account as described in the RH-003-2011 Decision.

5. TransCanada must by 1 May 2013 prepare and file with the Board a Compliance Filing containing revised tolls for all paths and services on the Mainline for the years 2013 to 2017 based on the multi-year fixed tolls approach as described in the RH-003-2011 Decision.

6. As part of its Compliance Filing, TransCanada must also prepare and file with the Board revised Tariff pages showing all changes black-lined from the current version, together with a clean version.

7. Interim tolls authorized in Order TGI-004-2011 and charged during 2013 will continue pending TransCanada's Compliance Filing and a final Order of the Board on Mainline tolls for 2013 and beyond.

8. Parties wishing to comment on TransCanada's Compliance Filing must file their comments with the Board and serve them on TransCanada within 14 calendar days from the date of the filing, and TransCanada shall have seven calendar days to file any reply.

NATIONAL ENERGY BOARD

Sheri Young
Secretary of the Board

Appendix II

List of Issues

The Board identified but did not limit itself to the following issues for discussion in the proceeding.

The following strategic issues relate to the consideration of TransCanada's Restructuring proposal and any alternative proposal(s) (Proposals):

1. Appropriateness of setting, or the obligation to set, Mainline tolls based on the historical regulatory compact, with recovery of a full traditional cost of service, in the current circumstances.
2. Effectiveness and durability of Proposals in supporting an economically sustainable Mainline.
3. Appropriate allocation of risks and rewards among TransCanada, Mainline shippers and other stakeholders and the extent to which the Proposals align with this allocation.
4. Whether it should be a goal or objective to effectively connect the Western Canada Sedimentary Basin to Eastern markets, and the extent to which the Proposals do so.
5. Alignment of Proposals with relevant tolling principles.

The following issues relate specifically to TransCanada's application and may relate to any alternative proposal(s):

6. Appropriateness of each of the Business and Services Restructuring Proposals and the components thereof, including:
    a. Depreciation Proposal;
    b. Alberta System Extension;
    c. Toll Design Proposals;
    d. Services and Pricing Proposals.
7. Fair Return for the Mainline for 2012 and 2013;
    a. Business risk;
    b. Cost of capital estimation;
    c. Setting the rate of return and treatment of debt costs.
8. Appropriateness of the proposed Mainline rate bases, revenue requirements and components thereof for 2012 and 2013.
9. Appropriateness of the "flow through" elements of the 2011 Mainline revenue requirement, including the continuing prudence of TransCanada's Transmission by Others arrangements and the amount of "used and useful" rate base.

Appendix III

Detailed Procedural History

On 1 September 2011, TransCanada, NOVA and Foothills submitted the Application to the Board. On 23 September 2011, the Board issued a letter announcing that it had decided to convene a pre-hearing planning conference (Conference) on 12 October 2011 and 13 October 2011, if necessary. The purpose of the Conference was to discuss any procedural matters that would result in an efficient hearing of the Application and to determine the issues the Board should consider.

On 27 September 2011, the Board issued Hearing Order RH-003-2011, which set out the procedures to be followed in the hearing, with some of the dates to be finalized after the Conference. The Board subsequently issued an agenda for the Conference on 29 September 2011, along with a Preliminary List of Issues for the hearing.

The Conference was held on 12 October 2011; and, the Board issued its procedural decisions and hearing timetable on 21 October 2011. Among other things, the Board decided that it would hear all of TransCanada's Application in one proceeding, it would provide for two rounds of information requests to TransCanada, and intervenors would be allowed to file reply evidence to the evidence of other intervenors. The Board announced that the oral portion of the hearing would commence on 4 June 2012 in the Board's hearing room in Calgary, Alberta, with sessions in Toronto, Ontario and Montréal, Québec during the summer. The Board also decided not to amend the Preliminary List of Issues.

On 31 October 2011, TransCanada filed a supplement and amendment to the Application with specific details of Mainline costs of service for 2012 and 2013, supporting schedules and resulting Mainline tolls for 2012 and 2013.

On 10 February 2012, several intervenors filed motions seeking a Board order compelling TransCanada to provide full and adequate responses to certain information requests. The Board established a written process to hear the motions, and on 24 February 2012, it issued its ruling on the motions.

On 13 March 2012, TransCanada subsequently filed additional amendments to certain parts of the Application to reflect actual 2011 costs for the purpose of determining the 2011 revenue requirement.

On 2 May 2012, TransCanada filed a motion seeking a Board order compelling certain intervenors to provide full and adequate responses to certain of its information requests. The Board established a written process to hear the motions, and on 11 May 2012, it issued its ruling on the motion.

On 29 June 2012, TransCanada filed a revised throughput forecast, together with consequential updates to the 2013 revenue requirement and 2013 Restructuring Proposal and Status Quo tolls.

The evidentiary portion of the hearing took place from 4 June to 29 June 2012 in Calgary, Alberta; 9 July to 20 July 2012 in Toronto, Ontario; 20 August to 31 August 2012 in Montréal, Québec; and 10 September to 4 October 2012 in Calgary, Alberta. The Board heard final argument in Calgary, Alberta from 13 November to 5 December 2012. In total, 72 hearing days were held.

Appendix IV

Streamlined Regulatory Process

Step	Action	Person Responsible	Timing
1	File, publish and serve Notice of Intention to file an Application	Applicant	4 weeks before filing the Application with the Board
2	File Application to Participate	Interested persons	2 weeks after Notice of Intention to file an Application is published or served on interested persons, whichever is later
3	Issue Procedural Directives	Board	3 weeks after the Notice of Intention to file an Application is filed or served, whichever is later
4	File Application with the Board	Applicant	4 weeks after filing the Notice of Intention to file an Application
5	Information Requests to Applicant	Participants & Board	1 week after filing of the Application
6	Responses to Information Requests	Applicant	2 weeks from receipt of Information Requests
7	Motion Day	Participants	3 days after receiving responses to Information Requests
8	Participants file written Evidence	Participants	2 weeks from Applicant's responses to Information Requests
9	Information Requests to the Participants	Applicant, Board and other Participants	1 week from filing of written Evidence
10	Responses to Information Requests	Participants	2 weeks from receipt of Information Requests
11	Motion Day	Applicant and other Participants	3 days after receiving responses to Information Requests
12	Reply Evidence	Applicant	1 week from Participants' filing of responses to Information Requests
13	Oral Argument	Applicant and all Participants	Commences 1 week after filing of Reply Evidence

14	Decision	Board	1 day to 4 weeks from close of record
	Total Time		**10 weeks**[83]

Below we discuss steps of the streamlined procedure that may require further explanation. The step number corresponds to the step in the streamlined procedure set out above.

Step 1: Notice of Intention to File an Application

The streamlined process will commence with the filing and publication of a "Notice of Intention to File an Application" (Notice).

The Notice must be in the form set out in Appendix "V". The Applicant must prepare the Notice, and file, serve and publish it without further direction from the Board. The Notice must be filed with the Board at least four weeks before a formal application is filed. During the four week period after the Notice is filed, the applicant can prepare the formal application while the Board and interested persons can prepare for a proceeding: for example, by finding and retaining experts, and counsel.

The Notice must set out, in summary form, an accurate description of the service and pricing proposal(s) that will be applied for. The Notice must provide a deadline for interested persons to indicate an intention to participate in the Board's proceeding. The deadline for interested persons to indicate their intention to participate must not be less than two weeks after the notice is published or served on interested persons, whichever is later. The Notice must be published in a national newspaper in both official languages and it must be served on all interested persons.

Applicants must take care in preparing, serving and publishing the Notice because no further notice of the Application will be provided. If the Notice, or how it is filed, served or published, is defective – for example, because the notice did not accurately reflect the content of the Application – then the streamlined procedure may be delayed.

Step 2: Application to Participate

Any person interested in participating in the proceeding considering the Application must file a Notice of Intention to Participate by filing a letter with the Secretary of the Board and serving a copy on the Applicant. The letter must include information that is typically filed in an Application for Intervenor Status (that is, the Participant's and authorized representative's name(s) and contact information, the participant's specific interest in the proceeding, official language for correspondence, and level of participation requested).

[83] This assumes that the Board will rule from the bench. If the Board provides its decision in writing it will be 14 weeks from the time an application is filed.

Step 3: Procedural Directives Letter

Assuming that the application is contested, the Board will, among other things, in the Procedural Directives Letter:

- set out the specific dates on which the remaining steps of the streamlined process will take place. The dates will substantially conform to the generic timeline set out above;
- indicate whether the *National Energy Board Rules of Practice and Procedure, 1995*,[84] (as they may be amended or replaced) are varied;
- provide a point of contact for the application; and
- provide an application number or reference number for future correspondence to the Board.

Step 4: The Application

In addition to information typically provided, the Application must set out details about how the Notice was served and published.

Steps 7 and 11: Motion Day

Any motions arising from responses to information requests must be filed with the Board and served on other participants within three days of the date the responses to information requests were filed with the Board. Moving parties must follow the format used by the Board in the RH-003-2011 proceeding.

Step 14: Board Decision

The Board will release its decision on the Application anywhere from one day to four weeks after the record is closed. The Board may rule orally from the bench, provide its decision with reasons to follow, or provide its decision and reasons concurrently in writing.

[84] S.O.R./95-208.

Appendix V

Notice of Intention to File an Application

National Energy Board
Notice of Intention to File an Application
[Insert Date[85] – date of Notice
must be at least four weeks before filing the formal application]

[Insert Company Name]
[Insert name of Application]

[Insert name of Company] will file an application with the National Energy Board (Board or NEB) on [Insert Date] requesting approval to [insert nature of relief sought, effective date, and specific section(s) of the *National Energy Board Act,* if applicable] (Application).

Copies of the Application will be available on [Insert Date Application will be filed with the Board] for viewing on the Board's website at www.neb-one.gc.ca (click on "View" under Regulatory Documents then "Quick Links" and scroll down to the Application), at [Insert Company's office address], and the Board's library (1st floor, 444 Seventh Ave. S.W., Calgary).

Any person interested in participating in the proceeding considering the Application may do so by filing an Application to Participate by [Insert date – two weeks after the Notice of Intention to file an Application is published or served on interested persons, whichever is later] with the Secretary of the Board and serving a copy on [insert name of company and company's Counsel] at the following addresses:

[Insert company and counsel contact information]

The Board will consider the Application pursuant to the streamlined process set out in Appendix IV of its RH-003-2011 Decision. The Board's RH-003-2011 Decision is available on the Board's website at www.neb-one.gc.ca.

You may obtain information on the streamlined process or how to participate by contacting the Secretary of the Board at 403-292-4800 or 1-800-899-1265.

Ms. Sheri Young
Secretary of the Board
National Energy Board
444 Seventh Avenue S.W.
Calgary, AB T2P 0X8
Facsimile: 403-292-5503
Facsimile (toll free): 1-877-288-8803

[85] Date should be expressed in Day Month Year format (that is, 12 December 2013).